P R O S P E C T U S

DXP SCALED-SALE

GRANTS PASS FIELD OFFICE
JOSEPHINE MASTER UNIT

Medford Sale # ORM07-TS-2023.0011
September 28, 2023 (SQF)

#1. Rum Creek Hazard Timber Sale, Josephine County, O&C, P.D.

BID DEPOSIT REQUIRED: $56,500.00

All timber designated for cutting in W½SW¼, SE¼SW¼ Section 5, SE¼NE¼, E½SE¼ Section 6, Lot 2, Lot 3, Lot 4, E½NE¼, NE¼SW¼, N½SE¼ Section 7, NE¼, SE¼NW¼, N½SW¼ Section 17, N½NE¼, SW¼NE¼, S½NW¼, N½SW¼, SE¼SW¼, S½SE¼ Section 29, E½SE¼ Section 30, N½NE¼, SW¼NE¼ Section 31, T. 34 S., R. 7 W.; N½NE¼, W½NW¼, SE¼NW¼, N½SW¼, S½SE¼ Section 15, E½NE¼, NE¼SE¼ Section 16, S½NE¼, N½SE¼ Section 21, N½NE¼, SE¼SW¼, SE¼ Section 22, Lot 7, Lot 8, W½NW¼, SW¼SW¼ Section 23, W½NW¼ Section 26, NE¼NE¼, NE¼NW¼ Section 27 T. 34 S., R. 8 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
10,396	5,573	Douglas-fir	6,732	$81.10	$545,965.20
324	297	ponderosa pine	357	$18.30+	$6,533.10
347	208	white fir	260	$34.40+	$8,944.00
245	132	sugar pine	166	$17.50+	$2,905.00
8	0.6	incense-cedar	1	$36.00+	$36.00
11,320	**6,210.6**	**Totals**	**7,516**		**$564,383.30**

*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 value by $24.32 per mbf to pay for deficit species white fir, incense-cedar ponderosa pine and sugar pine.

TIMBER AUCTION LOCATION – The timber auction will be held at the Grants Pass Inter-agency Office, located at 2164 NE Spalding, Grants Pass, Oregon, at 9:00 a.m. on Thursday, September 28, 2023.

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 Rum Creek Hazard timber sale was cruised using the PCMTRE and 3P cruise methods. The 240 acres of PCMTRE were cruised using a 40BAF and a 1 in 8 sampling frequency on 154 plots installed in a grid pattern. The 3 acres of roadside blue mark units were cruised using the 3P cruise method resulting in 12 sample trees (9 Douglas fir, 1 ponderosa pine, 1 sugar pine and 1 incense cedar). All of the **7,516 mbf** sale volume is salvage material. With respect to merchantable trees of all conifer species: the average tree is 24.2 inches DBHOB; the average gross merchantable log contains 170 bd. ft.; the total gross volume

is approximately 9,239 mbf; and 81% recovery is expected. (Average DF is 23.9 inches DBHOB; average gross merchantable log DF contains 166 bd. ft.)

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

All logs on timber loads will be painted and branded at the landing and accounted for accordance with Section 44 of the contract. If contract area is within a State that maintains a log brand register, brands shall be registered with the State and Purchaser shall use assigned brand(s) exclusively on logs from this contract until the Authorized Officer releases the brand(s).

CUTTING AREA – Twenty-three (23) units containing two hundred forty-three (243) acres of roadside hazard tree removal.

CUTTING TIME - Contract duration will be twenty-four (24) months for cutting and removal of timber.

ACCESS - Access to the sale area is available via: a public state and county road system to the contract area; existing BLM roads; and Right-of-Way and Road Use Agreement M-2000 with BTG Pactual PNW FUND IV REIT, Inc.

Among other conditions, Right-of-Way and Road Use Agreement M-2000 with BTG Pactual PNW FUND IV REIT, Inc. requires, but is not limited to:

1. Completion/execution of a license agreement between the Purchaser and BTG Pactual PNW FUND IV REIT, Inc.
2. Road renovation and road maintenance to be completed by the Purchaser.
3. Payment from the Purchaser for an estimated rockwear obligation of $1,923.21, based on the estimated cruised volume to be hauled across the aggregate roads listed in the license agreement.

ROAD MAINTENANCE – The Purchaser will be required to maintain all temporary roads (26.40 stations/0.50 miles) they construct plus 41.49 miles of existing BLM and private roads listed in Exhibit D6. An allowance in the amount of $139,231.74 has been made for the final maintenance of these roads. The Purchaser will be required to pay an estimated rockwear fee of $21,824.28 for the use of these rocked roads. The Purchaser will also be required to pay an estimated rockwear fee of $1,923.21 for the use of third-party roads. BLM will maintain the 20.12 miles of existing BST roads listed in Exhibit D6. The Purchaser will be required to pay an estimated maintenance fee of $33,378.67 for the use of the BLM maintained roads.

ROAD CONSTRUCTION – The Purchaser will be required to construct 26.40 stations of temporary road.

DECOMMISSIONING – An allowance in the amount of $6,008.30 has been made for temporary route decommissioning. Decommissioning work to be performed is described in Section 3500 of Exhibit D2, Decommissioning Worklist in Exhibit D4, Decommissioning Maps in Exhibit D5, and Estimate of Quantities in Exhibit D6.

SOIL DAMAGE PREVENTION - Pursuant to Section 26 of Form 5450-004, Timber Sale Contract, mechanical ground based harvesting, ground based yarding, skid trail, tractor-swing route, and landing rehabilitation, machine piling, temporary route construction, 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 5450-004, 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 5450-004, Timber Sale Contract, log haul shall not be conducted on hydrologically connected natural surface or rocked 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 5450-004, Timber Sale Contract, the Purchaser shall, prior to October 15 of the same operating season, winterize and rehabilitate temporary routes and tractor-swing routes, landings, hydrologically connected corridors and skidtrails 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.

Pursuant to Section 26 of Form 5450-004, Timber Sale 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 yoder capable of one-end log suspension with a minimum lateral yarding capability of seventy-five (75) feet while maintaining a fixed position during inhaul, and capable of an external yarding distance of six hundred fifteen (615) feet slope distance. 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; and capable of an external yarding distance of one thousand twenty-five (1,025) feet slope distance. 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 nozzels 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, 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 one hundred thirty-eight and three-quarters (138.75) acres of lop and scatter, fifty-three and three quarters (53.75) acres of hand pile and cover, twenty (20) acres of machine pile and cover, and fifty-six (56) acres of machine pile, cover, and burn landing decks.

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, or protect occupied marbled murrelet sites in accordance with the Standards and Guidelines of the Medford District Record of Decision (ROD) and Resource Management Plan (RMP). 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.

OPTIONAL CONTRIBUTION - The purchaser will have the option of performing fifty-three and three quarters (53.75) acres of hand pile burn and mop up slash disposal requirements or contributing four thousand eight hundred sixty-eight and 14/100 dollars ($4,868.14) in lieu thereof. The option must be declared upon execution of the contract. The purchaser will have the option of performing twenty (20) acres of machine pile burn and mop up slash disposal requirements or contributing one thousand five hundred sixty-nine and 88/100 dollars ($1,569.88) in lieu thereof. The option must be declared upon execution of the contract. The purchaser will have the option of performing fifty-six (56) acres of burn and mop up landing decks slash disposal requirements or contributing three thousand seven hundred eighty-seven and 03/100 dollars ($3,787.03) 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.

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. All leave trees will be selected by the Purchaser through Designation by Prescription (DxP) criteria as outlined in Exhibit F.

3. No harvest, yarding, or road construction operations within the sale area as shown on Exhibit A shall be conducted between March 1 and June 30 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from northern spotted owl surveys conducted in accordance with accepted standards, as approved by the Contracting Officer, that northern spotted owl nesting and/or fledging activities are not occurring during the year and/or time of harvest. This restriction may be extended until September 30th, if it is determined that owls are nesting and the project would cause a nesting spotted owl to flush.

4. 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.

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.

6. 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.

7. 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.

8. Artificial guyline anchors (equipment or deadmen) may be needed for unit 17-1.

9. 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 two hundred (200) feet of streams shown on Exhibit A shall be retained on site as coarse woody debris.

10. In units 7-4, 15-2, 15-5, and 17-1 it is acceptable to have yarding corridors and landings outside of unit boundaries. These corridors and landings shall be approved by the Authorized Officer prior to use.

11. In units 5-1, 7-5, 17-1, and 29-2 it is acceptable to utilize skid trails and landings outside of the unit boundaries, as approved by the Authorized Officer.

12. In units 6-1, and 6-3 some areas designated as ground base yard will need to utilize directionally falling of trees toward existing roads and existing skid trails and bull-lining trees to these areas.

13. In unit 5-1, 7-1, 17-1, 22-1, and 29-2 the Purchaser shall be allowed to walk a yarder into the unit utilizing a tractor-swing system as approved by the Authorized Officer.

14. Rehabilitate utilized skid trails in the portion of unit 21-1 in the DDR-CR land use allocation as shown on Exhibit A, by removing berms, properly installing water bars, covering with slash, and block.

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

To access Units 15-01, 15-02, 15-03, 15-04, 15-05, 16-01, 21-01, 21-02, 22-01, 22-02, 23-01, 26-01, and 27-01: Take Exit 61 from Interstate 5. Head west onto Merlin Rd for 3.6 miles. Continue west onto Galice Rd for another 11.4 miles. Turn left onto Galice-Access Rd (aka Bear Camp Rd) (BLM Road # 34-8-36.0) for 0.7 miles. Turn right onto Peavine Rd (BLM Road # 35-8-2.0) and continue for another 4.1 miles. **You will need a BLM gate key to get through the locked gate at the junction of the 34-8-28.0A (BST) and 34-8-28.0B (AGG) roads to access units 15-04, 21-01, and 21-02.**

To access Units 17-01, 29-01, and 29-02: Take Exit 61 from Interstate 5. Head west onto Merlin Rd for 3.6 miles. Continue west onto Galice Rd for another 4.8 miles. Turn right onto Hog Creek

Rd (BLM Road # 35-7-11.0) and continue for another 6.1 miles. **You will need a BLM gate key to get through the locked gate at the junction of the 34-7-21.6 and 34-7-29.2 roads to access unit 29-02.**

To access Units 05-01, 06-01, 06-03, 07-01, 07-02, 07-03, 07-04, and 07-05: Take Exit 71 from Interstate 5. Take a right onto I-5 Frontage Rd for 0.7 miles. Turn left onto Leland Rd and continue for 3.1 miles. Turn right onto Lower Grave Creek Rd for 2.6 miles. Turn left to stay on Lower Grave Creek Rd and continue for 1.8 miles. Turn left onto Angora Rd (BLM Road # 34-7-2.0).

ENVIRONMENTAL ASSESSMENT – A categorical exclusion DOI-BLM-ORWA-M070-2023-0002-CX was prepared for this sale, it was determined that the proposed action is in accordance with the approved land use plan and no further environmental analysis is required. This document is available for inspection as background for this sale at the Medford District Office and on the ePlanning website: https://eplanning.blm.gov/eplanning-ui/home.

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. 43. 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) AR-2 All timber on the Reserve Areas shown on Exhibit A and all blazed, painted, or posted trees which are on or mark the boundaries of the Reserve Areas, except approximately eight hundred eleven (811) Douglas-fir, ninety-four (94) ponderosa pine, thirty-five (35) sugar pine, nine (9) white fir, and eight (8) incense-cedar trees marked for cutting heretofore by the Government with blue paint above and below stump height in units 29-1, Individual Roadside Blue Mark Trees as shown on Exhibit A.

(C) IR-6 All green trees that need to be felled to facilitate logging in the Harvest Areas shown on Exhibit A shall remain onsite, unless they have the potential to roll or slide, creating a safety risk.

(D) IR-8 All timber except trees that meet the selection criteria outlined in the Designation by Prescription Selection Criteria Guidelines (Exhibit F) in the sale units shown on Exhibit A.

(E) IR-13 All green conifers in the Harvest Areas shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer.

(F) IR-14 All existing coarse woody debris in all units shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer.

(G) IR-14 Coarse woody debris at two (2) percent cover as an average at the scale of the treatment area in all units shown on Exhibit A which do not present a safety hazard as determined by the Authorized Officer.

Section 44

(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 dead and dying trees eight (8) inches or larger D.B.H.O.B. that meet the selection criteria outlined in the Designation by Prescription Selection Criteria Guidelines (Exhibit F), which are not reserved, shall be felled in all units and along the haul route shown on Exhibit A.

(5) L-12 In the units shown on Exhibit A, yarding/felling shall be done in accordance with the requirements for the designated area listed below.

Designated Area	Yarding Requirements or Limitations
Individual Roadside Blue Mark Hazard Trees Along the Haul Route	Directional falling to lead and away from streams shown on Exhibit A will be required. Landing size shall not exceed one-quarter (¼) acre, shall be located along existing roads, and shall be approved by the Authorized Officer. No landing creation or expansion shall occur without prior approval from the Authorized Officer. Design landings with adequate drainage.

Continued: Individual Roadside Blue Mark Hazard Trees Along the Haul Route	Conifer tops and limbs, hardwoods, brush, and other cut vegetation created from the individual hazard trees along the haul route shall be machine piled concurrently with felling operations and shall be machine piled and covered according to the slash disposal stipulations found in Sec. 44(E)(1)(b)(SD-1b). Mechanized felling operations that occur off of existing roads are subject to seasonal operating restrictions as described in Section 44(A)(7)(L-19) of this contract.
Designated Area	Yarding Requirements or Limitations
Ground Based Harvest & Ground Based (Tractor) Yard Units 5-1, 6-1, 6-3, 7-1, 7-3, 7-4, 7-5, 15-2, 15-4, 17-1, 21-1, 22-1, 22-2, 27-1, 29-1, 29-2	Mechanized harvesting operations are optional. All ground-based harvest units may be manually felled. Directional falling to lead and away from streams, unit boundaries, and resource buffers shown on Exhibit A will be required. 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. Cull material skidded to the landing may be required to be redistributed back into the unit. 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. The harvest equipment shall walk on existing or created slash as directed by the Authorized Officer. Equipment used off

Continued: Ground Based Harvest & Ground Based (Tractor) Yard Units 5-1, 6-1, 6-3, 7-1, 7-3, 7-4, 7-5, 15-2, 15-4, 17-1, 21-1, 22-1, 22-2, 27-1, 29-1, 29-2	designated skid trails shall minimize the number of trips into the unit. 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 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. Mechanized ground-based felling and yarding operations are subject to dry condition operating restrictions as described in Section 44(A)(7)(L-19) of this contract. Yarding tractor shall be equipped with an integral arch and yard with one-end log suspension. 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 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. Designate skid trails in locations that do not channel water into waterbodies, floodplains, and wetlands, or unstable areas. Rehabilitate utilized skid trails in the portion of unit 21-1in the DDR-CR land use allocation as shown on Exhibit A, by removing berms, properly installing water bars, covering with slash, and block. 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 Section 44(C)(12)(E-1).

Continued: Ground Based Harvest & Ground Based (Tractor) Yard Units 5-1, 6-1, 6-3, 7-1, 7-3, 7-4, 7-5, 15-2, 15-4, 17-1, 21-1, 22-1, 22-2, 27-1, 29-1, 29-2	Block skid trails following use. Landing size shall generally not exceed one-quarter (¼) 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 ditchline of roads. The use of blades while tractor yarding will be limited, equipment shall walk over as much ground litter as possible. In units 5-1, 7-5, 17-1, and 29-2 it is acceptable to utilize skid trails and landings outside of the unit boundaries, as approved by the Authorized Officer. In units 5-1, 7-1, 17-1, 22-1, and 29-2 walk yarder into the unit along the cable-tractor swing route as shown on Exhibit A. In units 6-1, and 6-3 some areas designated as ground base yard will need to utilize directionally falling of trees toward existing roads and existing skid trails and bull-lining trees to these areas.
Designated Area	Yarding Requirements or Limitations
Cable Yard Units 5-1, 6-1, 6-3, 7-1, 7-2, 7-4, 15-2, 15-3, 15-4, 15-5, 16-1, 17-1, 22-1, 22-2, 23-1, 26-1, 29-1, 29-2	Directional falling to the lead and away from streams, and unit boundaries shown on Exhibit A will be required. 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 twenty-five (1,025) feet slope distance. 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. Yarding corridors will be perpendicular to the contours.

Cable Yard Units 5-1, 6-1, 6-3, 7-1, 7-2, 7-4, 15-2, 15-3, 15-4, 15-5, 16-1, 17-1, 22-1, 22-2, 23-1, 26-1, 29-1, 29-2	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. Existing cable corridors shall be used whenever possible. Yarding corridors shall be approximately one hundred fifty (150) feet apart, measured at the tailholds. Yarding corridor widths shall not exceed six (6) feet either side of the skyline centerline. Landing size shall not exceed one-quarter (¼) 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. Design landings with adequate drainage so that they are not hydrologically connected to draws or the ditchline of roads. Corridors and landings may be needed outside of unit boundaries in units 7-4, 15-2, 15-5, and 17-1. These corridors shall be approved by the Authorized Officer prior to use. 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 two hundred (200) feet of streams shown on Exhibit A shall be retained on site as coarse woody debris. 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. In unit 17-1 artificial (deadmen or equipment) guyline anchors may be needed.

Cable Yard Units 5-1, 6-1, 6-3, 7-1, 7-2, 7-4, 15-2, 15-3, 15-4, 15-5, 16-1, 17-1, 22-1, 22-2, 23-1, 26-1, 29-1, 29-2	In unit 5-1, 7-1, 17-1, 22-1, and 29-2 the Purchaser shall be allowed to walk a yarder into the unit utilizing a tractor-swing system as approved by the Authorized Officer.

(6) 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.

(7) L-19 No mechanical ground-based harvesting, ground-based yarding, skid trail and landing creation and rehabilitation, tractor-swing route construction and rehabilitation, machine piling, temporary route reconstruction, temporary route decommissioning, or non-emergency road maintenance shall be conducted in the sale 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.

(8) L-19 No haul on all natural surface roads and rocked roads 34-7-5.1, 34-7-5.2, 34-8-21.3, and 34-8-22.2, and the portion of the 34-7-3.1 road that is west of the junction with the 34-7-5.1 road 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. Purchaser may also elect to rock these roads at their own expense. 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.

(9) L-20 No harvest, yarding, or road construction operations within the sale area as shown on Exhibit A shall be conducted between March 1 and June 30 of the same calendar year, both days inclusive. This restriction will not apply if it can be shown from northern spotted owl surveys conducted in accordance with accepted standards, as approved by the Contracting Officer, that northern spotted owl nesting and/or fledging activities are not occurring during the year and/or time of harvest. This restriction may be extended until September 30th, if it is determined that owls are nesting and the project would cause a nesting spotted owl to flush.

(10) 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 contact 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 pink paint above and below stump height by the Authorized Officer and thereby approved for cutting and removal by the Authorized Officer. The volume of the timber 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 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 in **units 6-1, 7-1, 15-3, 15-4, 15-5, 16-1, 17-1, 22-1, 22-2, 23-1, 26-1, 27-1, 29-1, and 29-2 as shown on Exhibit A** by blacking out blue paint, and/or applying orange 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.

(11) 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 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.

(B) ROAD CONSTRUCTION, MAINTENANCE, AND USE

(1) R-1 The Purchaser shall construct, improve, renovate, and/or decommission all roads and structures in strict accordance with the plans and specifications shown on Exhibit C and Exhibit D, which is attached hereto and made a part hereof.

(2) R-1a Any required construction, improvement, or renovation of structures and

roads 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.

(3) R-1b The Purchaser shall construct, use, and decommission temporary roads TR 15-02-A, TR 15-02-B, TR 22-01, and TR 07-04 by October 15th of the same respective operating season. If temporary roads are used over two dry seasons, temporary routes must be winterized by October 15th.

(4) R-1d Prior to completion and approval of sub-grade construction from all proposed temporary road construction and reconstruction, as shown on Exhibit C, all logs shall be removed from the designated right-of-way.

(5) R-2 The Purchaser is authorized to use the road listed and shown on Exhibit C for the removal of Government timber sold under the terms of this contract and/or the hauling of rock as required in Exhibits C, provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 44 (C)(7) and Section 44 (C)(10). Any road listed on Exhibits C & 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	Road Control	Road Surface Type	Maintenance Responsibility
34-7-2.0 A-B	2.16	BLM	AGG	Purchaser
34-7-3.0 A1-A2	2.07	BLM	AGG	Purchaser
34-7-3.1 A-F	7.82	BLM	AGG	Purchaser
34-7-5.1	1.89	BLM	AGG	Purchaser
34-7-5.2	0.95	BLM	AGG	Purchaser
34-7-7.2 A	0.11	BLM	NAT	Purchaser
34-7-15.4	0.10	BLM	AGG	Purchaser
34-7-21.6 A	1.00	**BTG**	AGG	Purchaser
34-7-21.6 B-C	1.86	BLM	AGG	Purchaser
34-7-22.0 A-B	0.29	BLM	AGG	Purchaser

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
34-7-29.2	2.08	BLM	NAT	Purchaser
34-7-36.0 K	0.51	BLM	AGG	Purchaser
34-7-36.0 L	1.62	**BTG**	NAT	Purchaser
34-7-36.0 M-O	2.65	BLM	NAT	Purchaser
34-8-15.0 A	1.11	BLM	AGG	Purchaser
34-8-21.0 A	0.14	BLM	AGG	Purchaser
34-8-21.0 B	0.14	BLM	NAT	Purchaser
34-8-21.3	0.13	BLM	AGG	Purchaser
34-8-22.1 B	0.79	BLM	AGG	Purchaser
34-8-22.1 C	0.30	BLM	NAT	Purchaser
34-8-22.2	0.62	BLM	AGG	Purchaser
34-8-22.3	0.56	BLM	NAT	Purchaser
34-8-27.0 A	0.88	BLM	BST	BLM
34-8-27.1	0.66	BLM	NAT	Purchaser
34-8-28.0 A	0.33	BLM	BST	BLM
34-8-28.0 B	1.25	BLM	AGG	Purchaser
34-8-34.0 A-B	5.26	BLM	BST	BLM
34-8-36.0 A1	0.73	BLM	BST	BLM
35-7-4.0	0.37	BLM	BST	BLM
35-7-11.0 A-C2	6.05	BLM	BST	BLM
35-7-11.0 C3-D	0.98	BLM	AGG	Purchaser
35-7-11.0 E	1.10	**BTG**	AGG	Purchaser
35-7-11.0 F-I	6.53	BLM	AGG	Purchaser
35-8-2.0 A1-C	6.50	BLM	BST	BLM
35-8-2.0 D-E	2.07	BLM	NAT	Purchaser
TR 15-02-A	0.12	BLM	NAT	Purchaser
TR 15-02-B	0.15	BLM	NAT	Purchaser
TR 22-01	0.08	BLM	NAT	Purchaser

Road No. and Segment	Length Miles Used	Road Control	Road Surface Type	Maintenance Responsibility
TR 07-04	0.15	BLM	NAT	Purchaser
TOTAL	**62.11**			

(6) 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 44(C)(5) 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.

(7) R-2d The Purchaser shall pay a road maintenance fee of $0.82 per thousand board feet log scale per mile for the use of roads 34-8-27.0 A, 34-8-28.0 A, 34-8-34.0 A-B, 34-8-36.0 A1, 35-7-4.0, 35-7-11.0 A-C2, and 35-8-2.0 A1-C and the Purchaser shall pay a road rockwear fee of $0.85 per thousand board feet log scale per mile for the use of all rocked roads maintained by the Bureau of Land Management or the Purchaser within the sale area. **The Purchaser will be required to label, with a permanent marker, each load ticket with the corresponding unit number as directed by the Authorized Officer.** The total maintenance fee due shall be based upon volumes determined pursuant to Exhibit B of this contract and mileage of roads used as determined by the Authorized Officer. Prior to the use of such roads, the Purchaser shall give written notice to the Authorized Officer of the roads intended for use in the removal of timber purchased under this contract, together with an estimate of the volume to be hauled over such roads. The Authorized Officer shall establish an installment schedule of payment of the maintenance obligation. If it is determined by the Authorized Officer, after all merchantable timber has been cut and scaled, that the total maintenance payments made under this contract exceed the total maintenance and rockwear payment due, such excess shall be returned to the Purchaser after such determination is made.

(8) R-2e The Contracting Officer may at any time, by written notice, terminate the Purchaser's operator 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 44(C)(5). 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 obligation(s).

(9) R-2f The Purchaser shall perform any required road repair and maintenance work on roads identified as Purchaser maintenance, under the terms of Exhibit D, Road Maintenance Specifications, of this contract, which is attached hereto and made a part hereof.

(10) R-3 In the use of Road No's. 34-7-21.6 Segment A, 34-7-36.0 Segment L, and 35-7-11.0 Segment E, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000, between the United States of America and BTG Pactual PNW FUND IV REIT Inc. This document is available for inspection at the Medford District Office.

These conditions include:

(a) Execution and compliance with the terms and conditions identified in the License Agreement between the Purchaser and BTG Pactual PNW FUND IV REIT Inc.

(b) Payment of a rockwear obligation of one thousand nine hundred twenty three and 21/100 dollars ($1,923.21) to BTG Pactual PNW FUND IV REIT Inc., payable at the time indicated on the License Agreement.

(c) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.

(d) 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.

(11) R-3c The Purchaser agrees that if they elect to use any other private road, which is the subject of a right-of-way agreement with the Government for the removal of Government timber sold under the terms of this contract, the Purchaser shall request

and agree to the modification of this contract to provide for such use and for allowances for amortization of the Government's share of the capital investment of any such road.

(12) 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.

(13) 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 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 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 rocked 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 (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.

(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. Equipment would be visually inspected by the Authorized Officer to verify that the equipment has been reasonably cleaned.

(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) If the equipment works in an area of BLM lands known to contain priority noxious weeds, then the equipment shall be cleaned prior to moving to another area. The Authorized Officer shall designate an appropriate area for equipment cleaning.

(f) Vehicles and equipment shall not park where high priority noxious weed infestations are known to occur and where noxious weed sites are flagged with orange flagging with black "NOXIOUS WEEDS" lettering.

(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), tractor swing routes, temporary routes to provide for adequate drainage, and utilized skid trails within two hundred (200) feet of streams and waterbodies as shown on Exhibit A, then stabilize and revegetate all bare soil with certified weed free straw mulch and a native seed mixture approved by the Authorized 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 with any substitutions approved 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	8 to 10 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:

Test	Grasses (%)	Forbs (%)
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 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 refuel equipment, store, or cause to have stored, any fuel or other petroleum products within one hundred fifty (150) feet of all riparian management or wet areas. 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 or temp routes that have the potential to release eroded fines into a

stream or wet area, directly or via draws or ditchlines. 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, tractor-swing routes, landings, hydrologically connected corridors and skidtrails 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.

(12) E-1 In addition to the requirement set forth in Section 26 of this contract, the Purchaser shall decommission: all ground based skid trails utilized in the DDR-CR land use allocation portion of unit 21-1, as shown on Exhibit A; all tractor-swing routes and temporary routes; all ground based skid trails utilized within two hundred (200) feet of streams and waterbodies as shown on Exhibit A; and ground based skid trails, 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) The Purchaser shall simultaneously remove berms, water bar, cover bare soil with slash, seed and 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 C7-1 and Exhibit D7 which is attached hereto and made a part hereof.

Gradient (Percent)	Water bar Spacing
2-5%	200 feet
6-10%	150 feet
11-15%	100 feet
16-20%	75 feet
21-35%	50 feet
36+%	50 feet

(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) 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.b. of the contract. Any First Installment amount temporarily reduced may be refunded or transferred to another BLM contract at the request of the Purchaser. However, if the Purchaser has outstanding debt owing the United States, the Contracting Officer must first apply the amount of First Installment that could be refunded to the debt owed in accordance with the Debt Collection Improvement Act, as amended (31 USC 3710, et seq.). Upon Purchaser's receipt of a bill for collection and written notice from the Contracting Officer lifting the suspension, the Purchaser shall restore the First Installment to the full amount shown in Section 3.b of the contract within 15 days after the bill for collection is issued, subject to Section 3.j. 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, 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 during this time period.

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 are nesting within 0.25 miles of the harvest units. 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. 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 and the State of Oregon Department of Forestry.

(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.

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, and Oregon Department of Forestry. 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 bucker 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.

(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 in units 5-1, 6-1, 6-3, 7-1, 7-2, 7-3, 7-4, 7-5, 15-2, 15-3, 15-4, 15-5, 16-1, 21-1, 22-1, 22-2, 23-1, 26-1, 27-1, and 29-1 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 associated with the individual blue mark hazard trees along the haul routes as shown on Exhibit S. Slash shall be piled by machine from newly constructed, reconstructed, or existing roads only. Piling shall be completed in accordance with Exhibit S as directed by the Authorized Officer. Finished piles shall be tight and free of earth.

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.

2. 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. Do not pile pieces of slash with a diameter greater than twelve (12) inches.

3. All equipment shall be approved by the Authorized Officer. Piling shall be accomplished using a track mounted hydraulic excavator or equivalent with at least a five (5) tooth brush rake. The excavator shall have a minimum reach of twenty (20) feet. The excavator shall be equipped with a hydraulic thumb or rotating controllable grapple head. Finished piles shall be tight and free of dirt and other non-woody debris.

4. Piles shall be less than sixteen (16) feet in height and width.

5. Machine piling operations are limited to existing or newly constructed, reconstructed, or existing roads; and to seasonal restrictions as described in Sec. 44(A)(7)(L-19), Sec. 44(A)(9)(L-20), and dry conditions as described in Sec. 44(C)(1)(E-1).

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. The Purchaser is required to furnish the fuel and equipment for machine pile burning.

(c) SD-1c Hand pile, cover, and burn all slash situated in units 17-1 and 29-2 as shown on Exhibit S. Slash shall be piled by hand. Finished piles shall be tight and free of earth.

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.

2. Slash includes 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.

3. Hand pile all slash which is between one (1) and six (6) inches in diameter on the large end and exceeds two (2) feet in length, or as directed by the Authorized Officer.

4. Hand piles shall be covered with a large enough piece of four (4) mil polyethylene sheeting to ensure a dry ignition spot, generally five (5) feet by five (5) feet or large enough to cover eighty (80) percent of the pile.

5. Hand piles shall not be placed adjacent to or within ten (10) feet of leave trees or large woody debris.

6. Hand piles shall not be located on roadways, turnouts, shoulders, or cut banks, unless authorized by the Authorized Officer.

(d) 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 feet (15) from any Reserve Tree and/or as directed by the Authorized Officer.

Upon completion of landing piling, the Purchaser shall remove flammable material around each landing pile to prevent escaped fire. 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.

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 Sections 44(E)(1)(SD-1) and 44(E)(2)(SD-2). 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 associated with the individual blue mark hazard trees along the haul routes 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.

7. All ignition personnel will be directly supervised by a BLM representative.

(b) For mop-up of machine piles associated with the individual blue mark hazard trees along the haul routes 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 hand piles in units 17-1 and 29-2 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 ten (10) 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 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.

5. Ten (10) drip torches.

6. Hand ignition with drip torches is required in pile burn units.

7. All ignition personnel will be directly supervised by a BLM representative.

(d) For mop up of hand piles in units 17-1 and 29-2 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.

(e) 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.

(f) 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.

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 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 and site preparation work on approximately two hundred twelve and one half (212.50) 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	$48.00
Hand Pile and Cover	0-25 piles/acre	$545.00
Hand Pile Burn and Mop-up	0-25 piles/acre	
Machine Pile and Cover	Cost per acre	$490.00
Machine Pile Burn and Mop-up	0-20 piles/acre	
Cover and Burn Landing Decks	Cost per acre	

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

Appraised Treatment	Acres	Cost/Acre	Total Cost Per Treatment
Lop and Scatter	138.75	$48.00	$6,660.00
Hand Pile and Cover	53.75	$545.00	$29,293.75
Hand Pile Burn and Mop-up	53.75	$75.00	$4,031.25
Machine Pile and Cover	20.00	$490.00	$9,800.00
Machine Pile Burn and Mop-up	20.00	$65.00	$1,300.00
Cover and Burn Landing Decks	56.00	$56.00	$3,136.00
Total	**268.50**		**$54,221.00**

(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 44(E)(3)(SD-5)(a) differs from fifty four thousand two hundred twenty-one and 00/100 dollars ($54,221.00), as calculated by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 44(E)(4)(SD-5)(a).

(d) Lop and scatter shall be done in accordance with Section 44(E)(1)(SD-1)(a)(SD-1a); Machine piling shall be done in accordance with Section 44(E)(1)(SD-1)(b)(SD-1b); Hand piling shall be done in accordance with Section 44(E)(1)(SD-1)(c)(SD-1c).

(F) BUYOUT SECURITIES

(1) B-1 The Purchaser shall perform machine pile burning and mop up in accordance with Section 44(E)(2)(SD-2)(a&b). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a buyout security deposit to the Bureau of Land Management in the amount of one thousand five hundred sixty-nine and 88/100 dollars ($1,569.88), and upon making such deposit, the Purchaser shall be relieved of the obligations set out in these subsections. The Purchaser shall notify the Authorized Officer of their intention to make this deposit prior to the date of execution of this contract, and the Authorized Officer shall establish a required schedule of payments.

(2) B-1 The Purchaser shall perform hand pile burning and mop up in accordance with Section 44(E)(2)(SD-2)(c&d). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a buyout security deposit to the Bureau of Land Management in the amount of four thousand eight hundred sixty-eight and 14/100 dollars ($4,868.14), and upon making such deposit, the Purchaser shall be relieved of the obligations set out in these subsections. The Purchaser shall notify the Authorized Officer of their intention to make this deposit prior to the date of execution of this contract, and the Authorized Officer shall establish a required schedule of payments.

(3) B-1 The Purchaser shall perform landing pile cover, burning, and mop up in accordance with Section 44(E)(2)(SD-2)(e&f). The Purchaser shall have the option of completing this work, or in lieu thereof, may make a buyout security deposit to the Bureau of Land Management in the amount of three thousand seven hundred eighty-seven and 03/100 dollars ($3,787.03), and upon making such deposit, the Purchaser shall be relieved of the obligations set out in these subsections. The Purchaser shall notify the Authorized Officer of their intention to make this deposit prior to the date of execution of this contract, and the Authorized Officer shall establish a required 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 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 (8¾) 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 (8¾) 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-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.

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

In the event of the 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.

Rum Creek Hazard Timber Sale Seasonal Restriction Matrix, Contract # ORM07-TS-2023.0011

Unrestricted Period
Operations Restricted To Dry Condition, Waiver Required
Operations Restricted While NSO Surveys Occur, Restriction May Be Extended IF Owls Are Nesting
Operations Restricted

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

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

*** **All road maintenance and improvements must be completed before wet season haul can occur on the roads. The Purchaser may elect to make improvements to Dry Condition Haul Roads listed to allow for All Season Haul, as approved by the Authorized Officer. Haul will be suspended if the roads begin to show damage or conditions develop that could cause damage to the road as described in Sec. 44(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 ribbons 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
Cable Yard Units with All Season Haul: 15-3, 16-1, 26-1	Manual Falling and Bucking*																								
	Cable Yarding*																								
	Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling***																								
Ground Based Yard Unit with All Season Haul: 27-1	Manual Falling and Bucking*																								
	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling***																								

Rum Creek Hazard Timber Sale Seasonal Restriction Matrix, Contract # ORM07-TS-2023.0011

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 Unit with All Season Haul: 22-2	Manual Falling and Bucking*																								
	Cable Yarding*																								
	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling***																								
Cable Yard Units with Dry Condition & All Season Haul: 7-2, 15-5, 23-1	Manual Falling and Bucking*																								
	Cable Yarding*																								
	Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling on the portion of the 34-7-3.1 road that is west of the 34-7-5.1 junction; the portion of the 35-8-2.0 road that is north of the 34-8-27.0 junction; and the 34-8-22.2 and 34-8-22.3 Rds***																								
	Hauling on the portion of the 34-7-3.1 road that is east of the 34-7-5.1 junction; the portion of the 35-8-2.0 road that is south of the 34-8-27.0 junction; and the 34-7-2.0, 34-7-3.0, 34-8-34.0, and all Paved Rds***																								

Rum Creek Hazard Timber Sale Seasonal Restriction Matrix, Contract # ORM07-TS-2023.0011

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 with Dry Condition & All Season Haul: 7-3, 7-5, 21-1, Individual Roadside Blue Mark Trees	Manual Falling and Bucking*																								
	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling on 34-7-7.2, 34-7-29.2, 34-7-36.0, 34-8-21.0, and 34-8-21.3 Rds, and the portion of the 34-7-3.1 road that is west of the 34-7-5.1 junction***																								
	Hauling on the 34-7-2.0, 34-7-3.0, and 34-8-28.0 Rds, the portion of the 34-7-3.1 road that is east of the 34-7-5.1 junction, and all Paved Rds***																								
Cable & Ground Based Yard Units with Dry Condition & All Season Haul: 6-1, 6-3, 15-4, 29-1	Manual Falling and Bucking*																								
	Cable Yarding*																								
	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling on 34-7-5.1 and 34-7-29.2 Rds, and the portion of the 34-8-22.1 road east of Sec. 15 ***																								
	Loading and Hauling on 34-7-2.0, 34-7-3.0, 34-7-3.1, 34-7-21.6, 34-7-22.0, 34-8-28.0, and 35-7-11.0 Rds, the portion of the 34-8-22.1 road west of Sec. 15, and all Paved Rds***																								

Rum Creek Hazard Timber Sale Seasonal Restriction Matrix, Contract # ORM07-TS-2023.0011

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, Tractor-Swing & Ground Based Yard Units with Dry Condition & All Season Haul: 5-1, 7-1, 17-1, 29-2	Manual Falling and Bucking*																								
	Cable Yarding*																								
	Mechanical Ground Based Harvesting, Yarding & Piling, Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling on 34-7-5.2 and 34-7-29.2 Rds, the portion of the 34-7-36.0 road west of section line btwn 15 &16, and the portion of the 34-7-3.1 road west of the 34-7-5.1 junction ***																								
	Loading and Hauling on 34-7-2.0, 34-7-3.0, 34-7-3.1, 34-7-15.4, 34-7-21.6, 34-7-22.0, and 35-7-11.0 Rds, the portion of the 34-7-3.1 road east of 34-7-5.1 junction, the portion of the 34-7-36.0 road east of section line btwn 15 & 16, and all Paved Rds***																								
Cable & Ground Based Yard Units with Road Construction, and Dry Condition & All Season Haul: 7-4, 15-2	Manual Falling and Bucking*																								
	Cable Yarding*																								
	Mechanical Ground Based Harvesting, Yarding & Piling, Temp. Route & Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling on all Temp. Routes, the 34-7-7.2 Rd, and the portion of the 34-7-3.1 road west of the 34-7-5.1 junction***																								
	Loading and Hauling on the 34-7-2.0, 34-7-3.0, and 34-7-3.1 Rds, the portion of the 35-8-2.0 road south of the 34-8-27.0 junction, and all Paved Rds***																								

Rum Creek Hazard Timber Sale Seasonal Restriction Matrix, Contract # ORM07-TS-2023.0011

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, Tractor-Swing & Ground Based Yard Unit with Road Construction, and Dry Condition & All Season Haul: 22-1	Manual Falling and Bucking*																								
	Cable Yarding*																								
	Mechanical Ground Based Harvesting, Yarding & Piling, Temp. Route & Landing Construction, and Rehabilitation Activities Involving Heavy Equipment																								
	Road Maintenance**																								
	Loading and Hauling on all Temp. Routes, the 34-8-27.1 Rd, and the portion of the 35-8-2.0 road north of the 34-8-27.0 junction***																								
	Loading and Hauling on the portion of the 35-8-2.0 road south of the 34-8-27.0 junction, and all Paved Rds***																								

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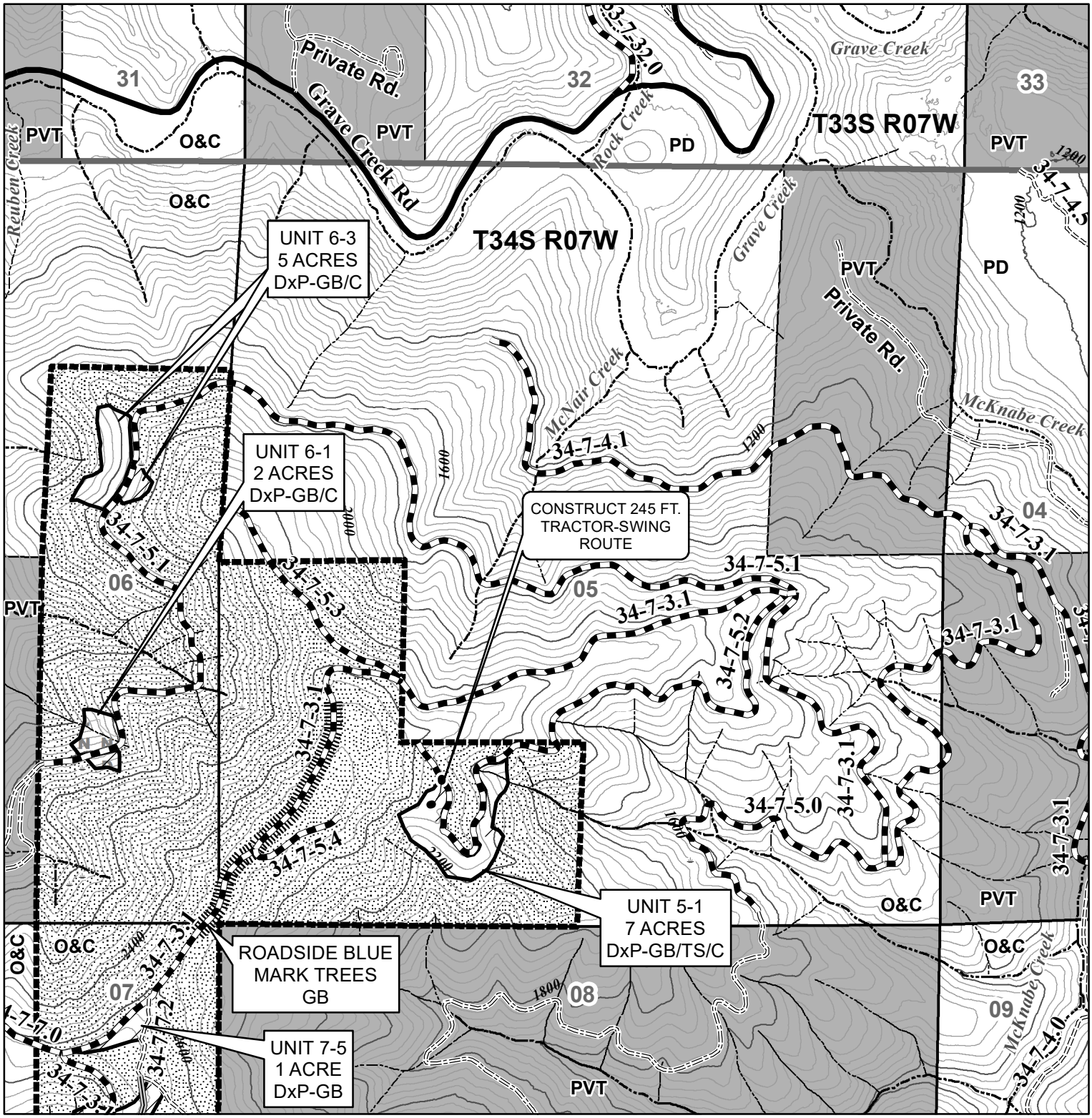
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0011
T. 34 S., R. 7 W., SEC. 5 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



0 750 1,500 3,000 Feet

1 inch = 1,000 feet

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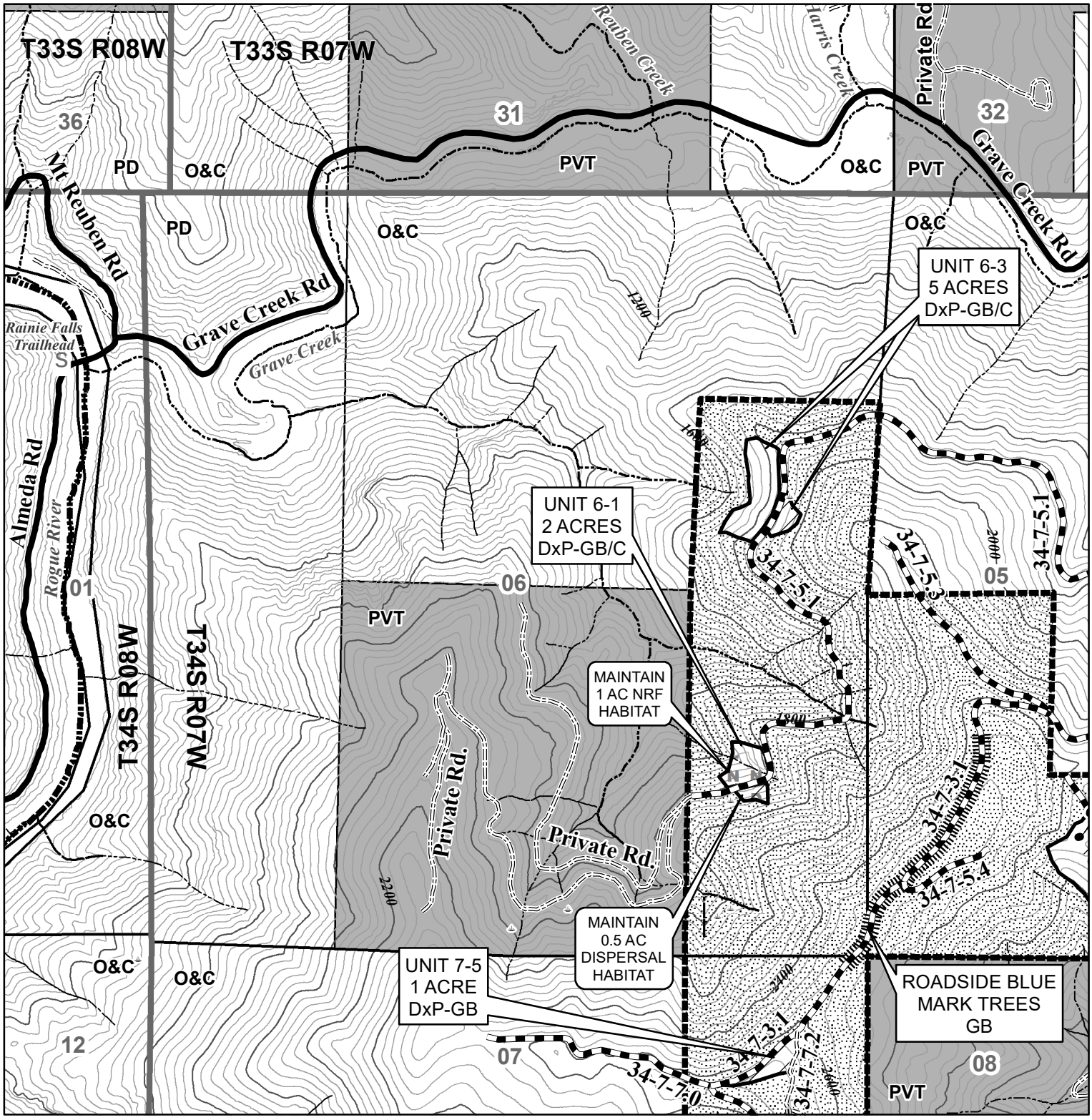
T. 34 S., R. 7 W., SEC. 6 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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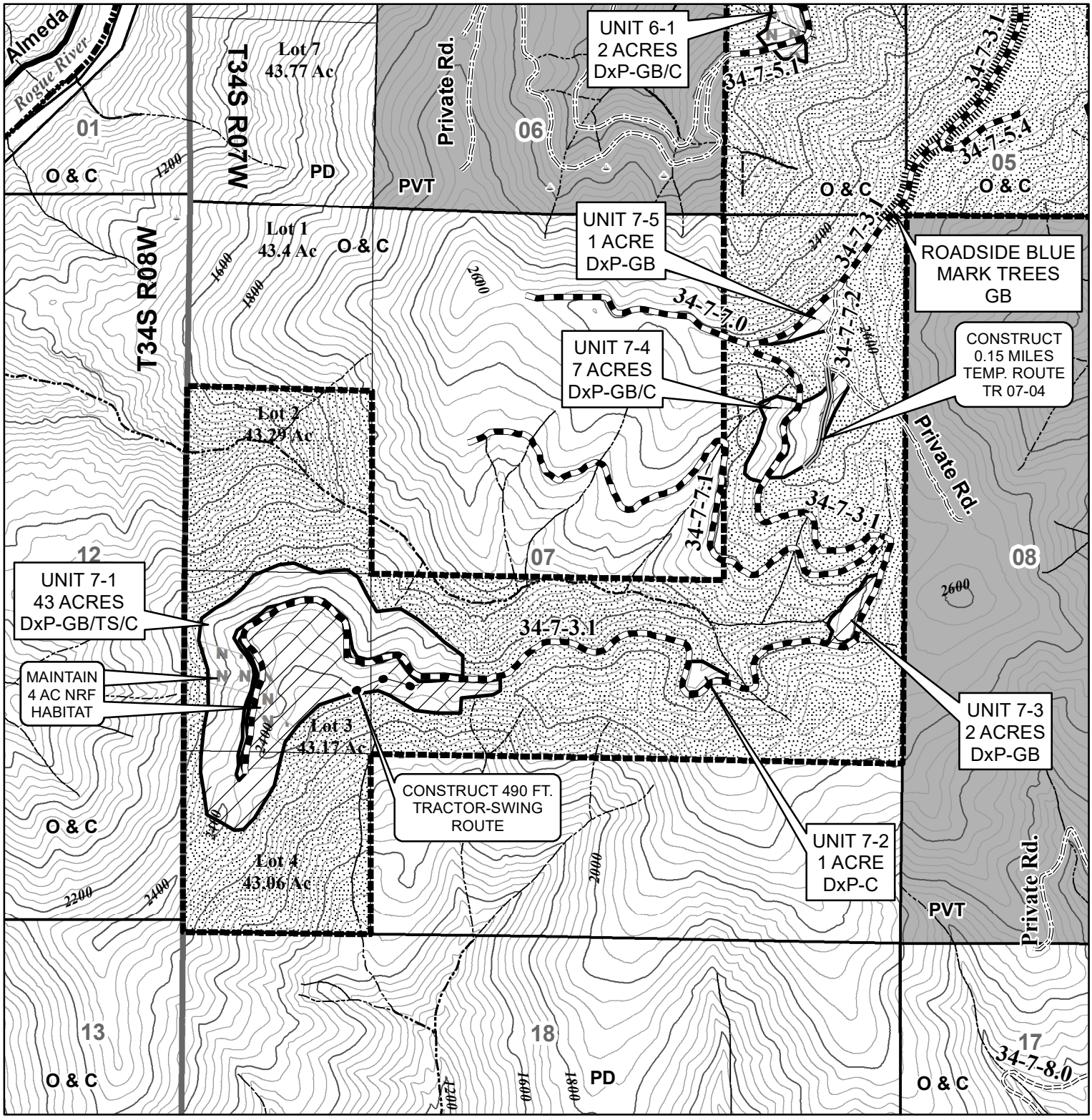
T. 34 S., R. 7 W., SEC. 7 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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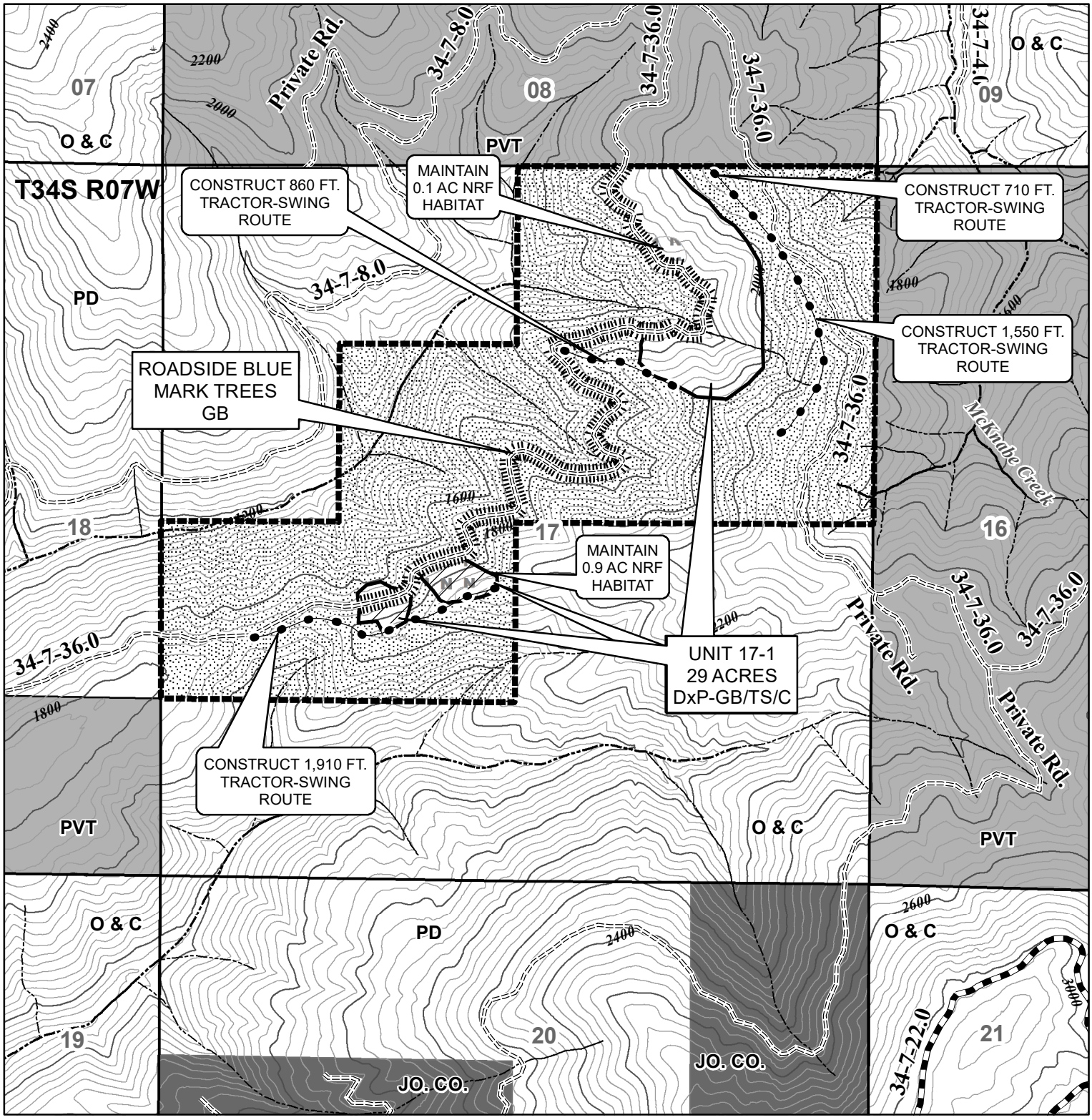
T. 34 S., R. 7 W., SEC. 17 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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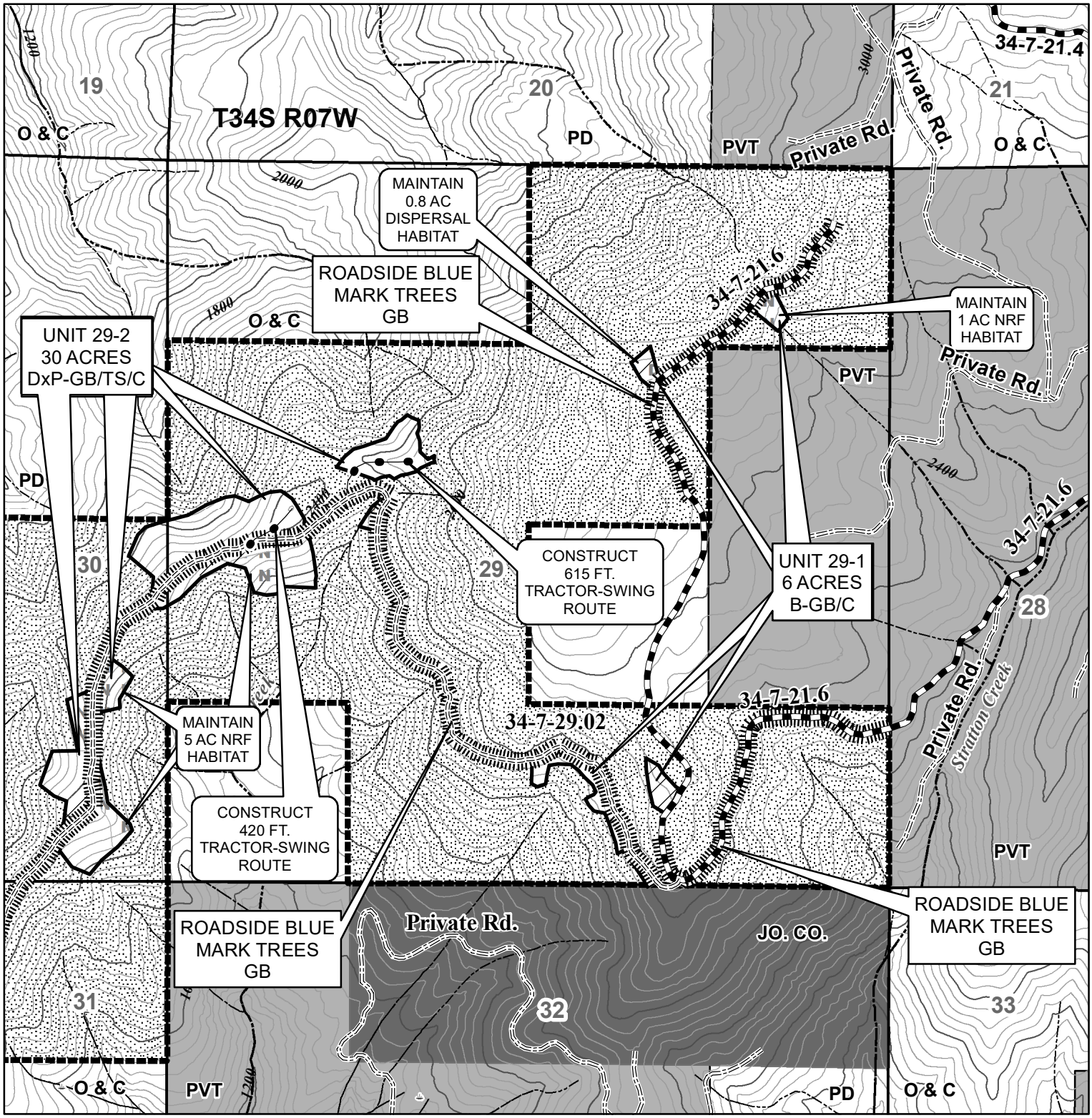
T. 34 S., R. 7 W., SEC. 29 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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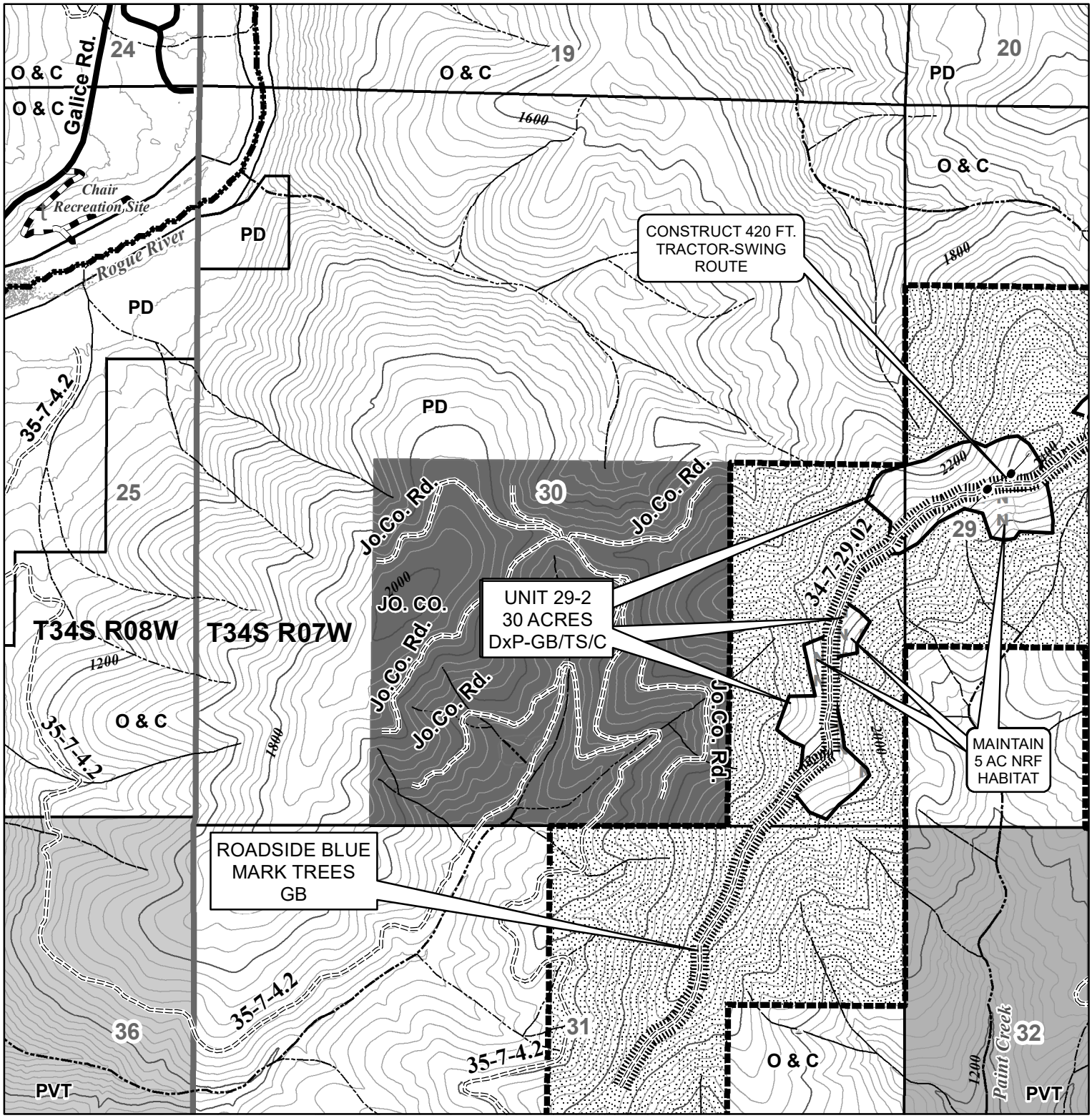
T. 34 S., R. 7 W., SEC'S 30 & 31 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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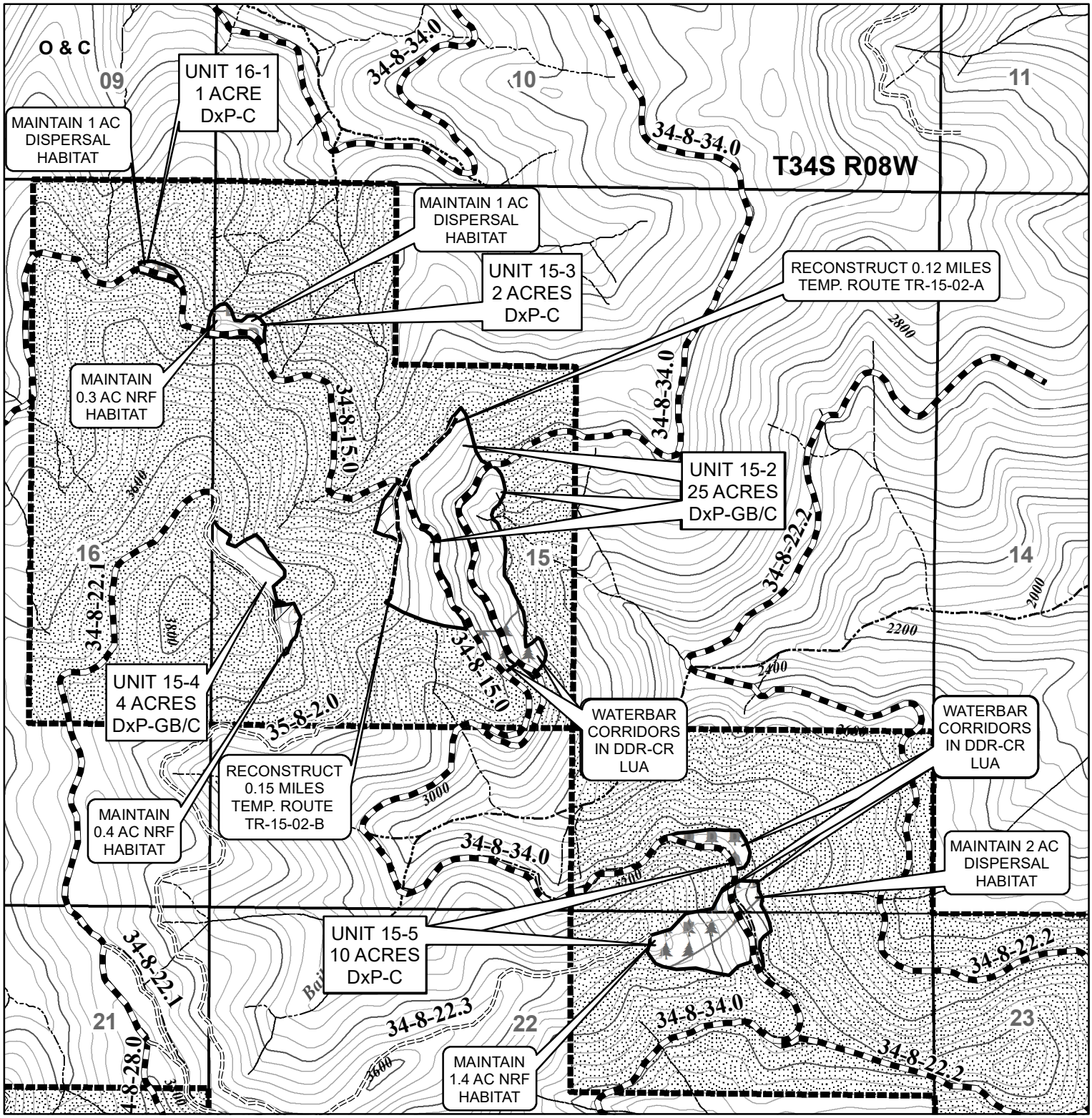
T. 34 S., R. 8 W., SEC'S 15 &16 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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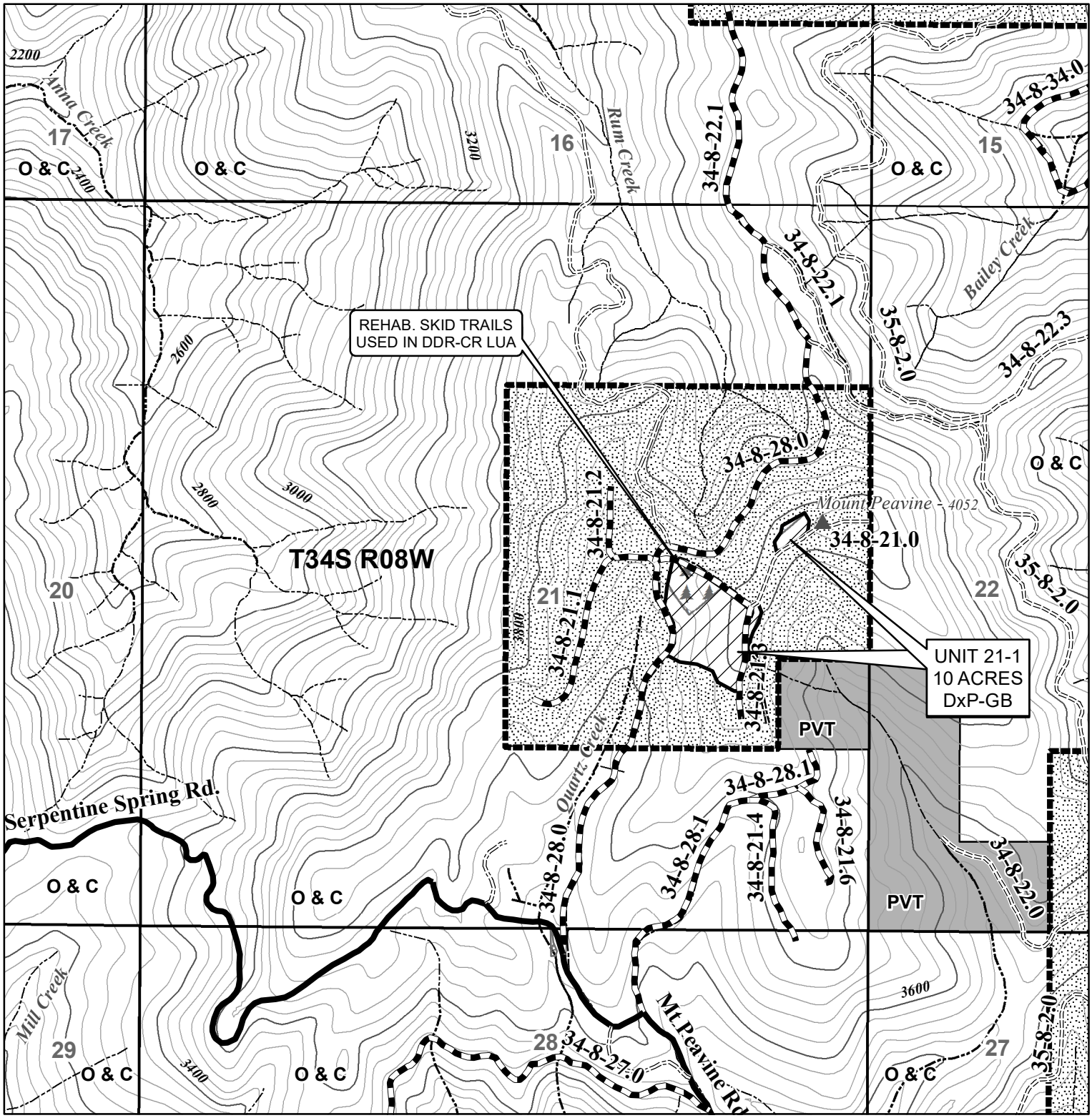
T. 34 S., R. 8 W., SEC. 21 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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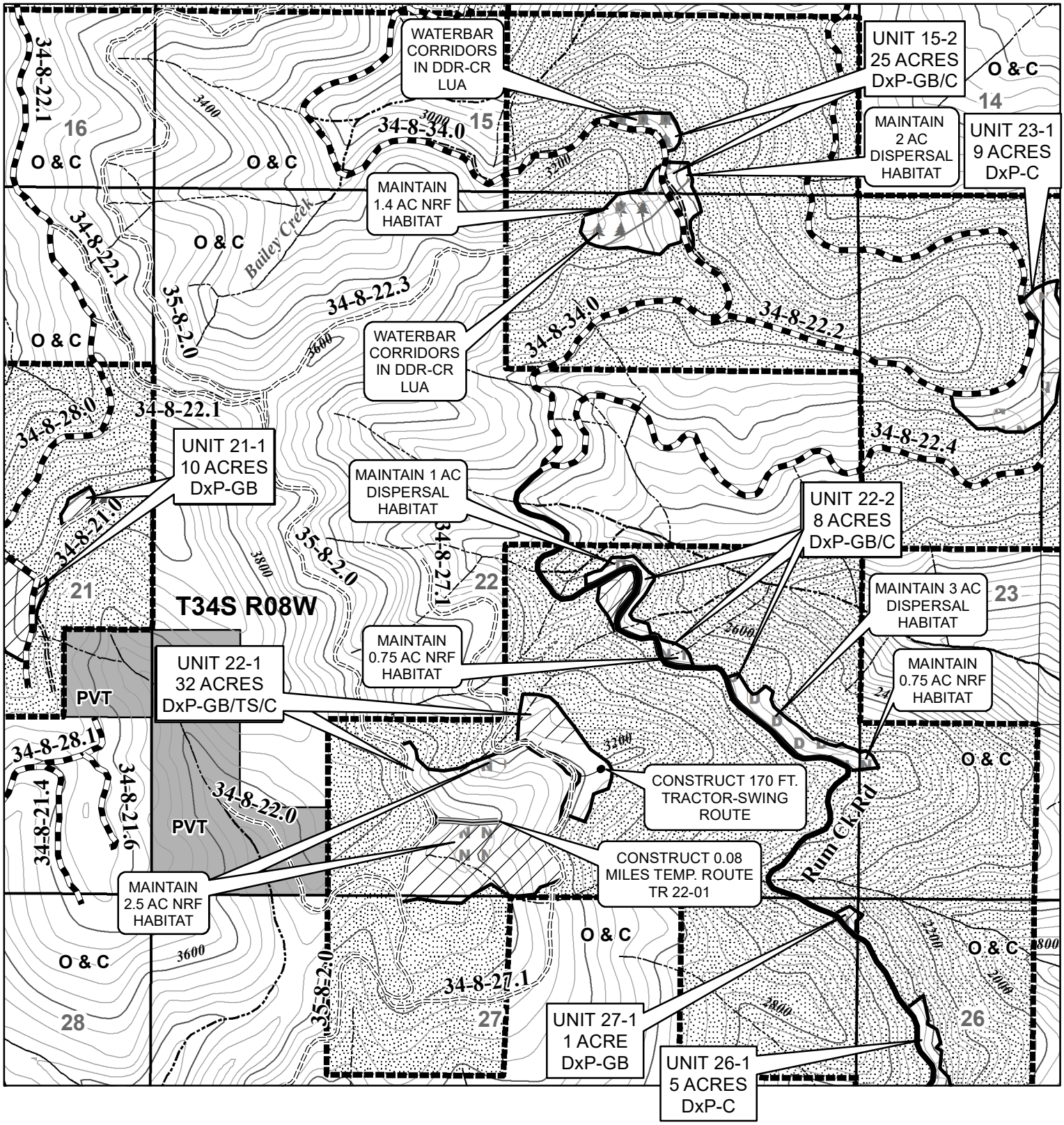
T. 34 S., R. 8 W., SEC. 22 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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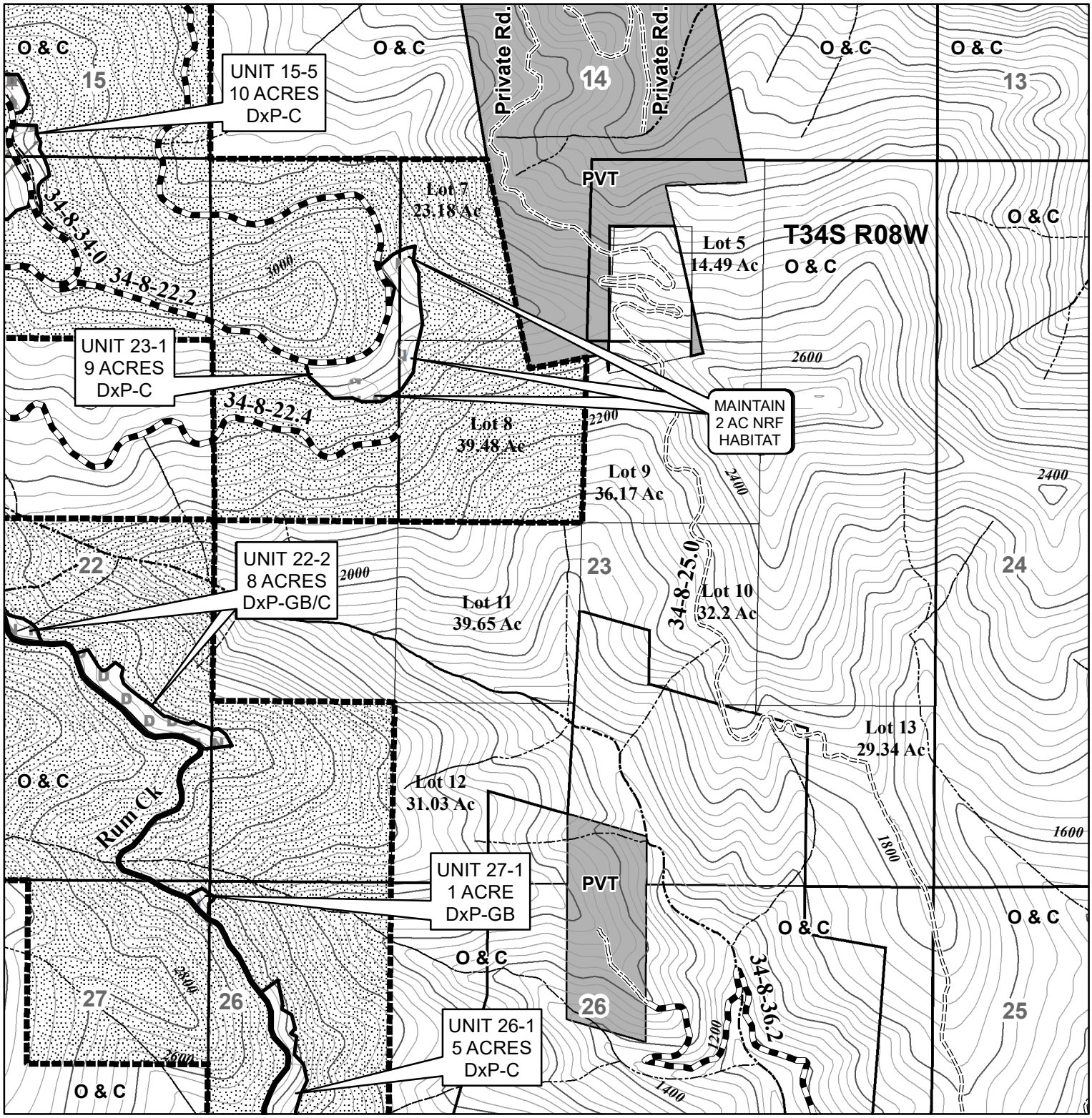
T. 34 S., R. 8 W., SEC. 23 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT A



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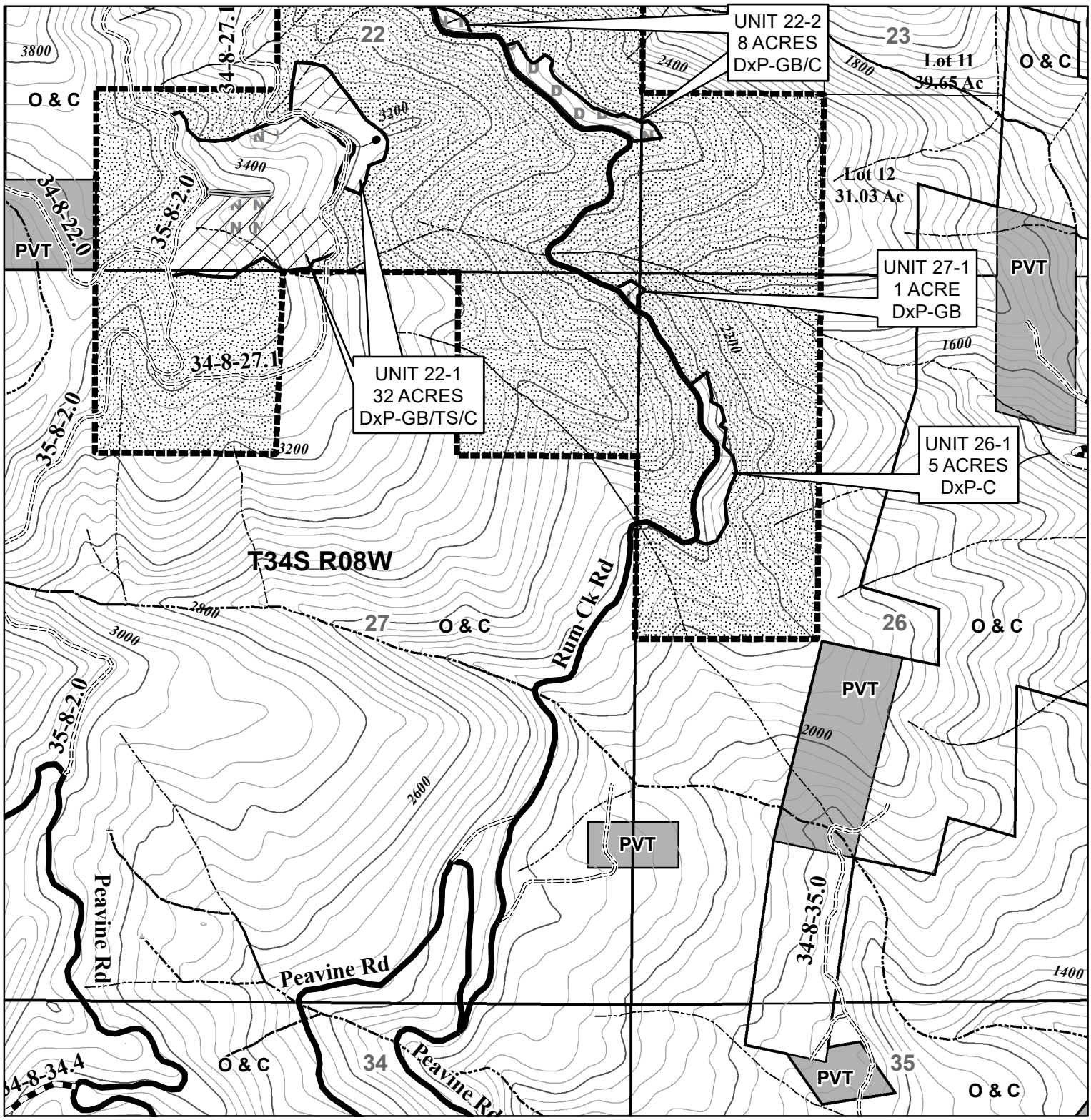

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Legend

- Mountain Peak
- Gate
- Parking Area
- Trailhead
- Seep or Spring
- Intermittent Stream
- Perennial Stream
- Rogue River
- Intermediate 40-ft contour
- Index 200-ft contour
- Tractor-Swing Route

Rum Creek Hazard Road Construction

- Temporary Route Construction
- Temporary Route Reconstruction

Road

SurfaceType

- Paved
- Rocked
- Natural Surface
- Individual Roadside Hazard
- Trees - Blue (Cut) Tree Mark

Rum Creek Hazard TS Units

Logging System

- Cable or Cable-Tractor-Swing
- Ground Based

Rum Creek Hazard Owl Habitat Maintain Areas

- Dispersal Maintain
- Nesting Roosting Foraging Maintain
- Rum Creek Hazard Units in Congressional Reserved LUA
- Contract Area Boundary
- Reserve Area
- Township and Range
- Section
- Lot

Ownership

- O & C — Bureau of Land Management O & C Lands
- PD — Bureau of Land Management Public Domain Lands
- JO. CO. — Josephine County
- ODF — Oregon Department of Forestry
- PVT — Private

DxP = DESIGNATION BY PRESCRIPTION HAZARD TREE REMOVAL
B = BLUE MARK CUT TREE
GB = GROUND BASE YARD
TS = CABLE-TRACTOR-SWING YARD
C = CABLE YARD

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LEGEND

UNIT	UNIT ACRES	PAINT COLOR-LOGGING SYSTEM
5-1	7	DxP-GB/TS/C
6-1	2	DxP-GB/C
6-3	5	DxP-GB/C
7-1	43	DxP-GB/TS/C
7-2	1	DxP-C
7-3	2	DxP-GB
7-4	7	DxP-GB/C
7-5	1	DxP-GB
15-2	25	DxP-GB/C
15-3	2	DxP-C
15-4	4	DxP-GB/C
15-5	10	DxP-C
16-1	1	DxP-C
17-1	29	DxP-GB/TS/C
21-1	10	DxP-GB
22-1	32	DxP-GB/TS/C
22-2	8	DxP-GB/C
23-1	9	DxP-C
26-1	5	DxP-C
27-1	1	DxP-GB
29-1	6	B-GB/C
29-2	30	DxP-GB/TS/C
BM	3	B-GB
TOTAL	**243**	

* BOUNDARIES OF HARVEST UNITS ARE POSTED AND PAINTED IN ORANGE

DxP = DESIGNATION BY PRESCRIPTION HAZARD TREE REMOVAL
B = BLUE MARK CUT TREE
GB = GROUND BASE YARD
TS = CABLE-TRACTOR-SWING YARD
C = CABLE YARD

SUMMARY

DxP-C	DESIGNATION BY PRESCRIPTION HAZARD TREES- CABLE YARD (UNITS 7-2, 15-3, 15-5, 16-1, 23-1, 26-1)	28 ACRES
DxP-GB	DESIGNATION BY PRESCRIPTION HAZARD TREES - GROUND BASE YARD (UNITS 7-3, 7-5, 21-1, 27-1)	14 ACRES
DxP-GB/C	DESIGNATION BY PRESCRIPTION HAZARD TREES- GROUND BASE & CABLE YARD (UNITS 6-1, 6-3, 7-4, 15-2, 15-4, 22-2)	51 ACRES
DxP-GB/TS/C	DESIGNATION BY PRESCRIPTION HAZARD TREES- GROUND BASE, CABLE-TRACTOR-SWING & CABLE YARD (UNITS 5-1, 7-1, 17-1, 22-1, 29-2)	141 ACRES
B-GB	BLUE MARK CUT TREE - GROUND BASE YARD (INDIVIDUAL ROADSIDE BLUE MARK HAZARD TREES)	3 ACRES
B-GB/C	BLUE MARK CUT TREE - GROUND BASE & CABLE YARD (UNIT 29-1)	29 ACRES
	TOTAL TIMBER SALE UNIT AREA	243 ACRES
	RESERVE AREA	2,389.18 ACRES
	TOTAL CONTRACT AREA	2,632.18 ACRES

1 inch = 1,000 feet

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

40 FOOT CONTOUR INTERVAL

United States
Department of the Interior
Bureau of Land Management

Timber Appraisal

Sale Name:	Rum Creek Hazard	**Sale Date:**	Thursday, August 24, 2023
BLM District:	Medford DO	**Unit of Measure:**	16' MBF
Contract #:	ORM07-TS-2023.0011	**Contract Term:**	24 months
Sale Type:	Advertised	**Contract Mechanism:**	5450-004 Scale Sale of Timber and other Wood Products

Content

Prepared By: Caulfield, David J - 7/17/2023
Approved By: Caulfield, David J - 7/17/2023

Legal Description of Contract Area

Land Status	County	Township	Range	Section	Subdivision	Meridian
O&C	Josephine	34S	7W	5	W1/2SW1/4, SE1/4SW1/4	Willamette
O&C	Josephine	34S	7W	6	SE1/4NE1/4, E1/2SE1/4	Willamette
O&C	Josephine	34S	7W	7	Lot 2,3,4, E1/2NE1/4, NE1/4SW1/4, N1/2SE1/4	Willamette
O&C	Josephine	34S	7W	17	NE1/4, SE1/4NW1/4, NE1/4SW1/4	Willamette
O&C	Josephine	34S	7W	29	N1/2NE1/4, SW1/4NE1/4, S1/2NW1/4, N1/2SW1/4, SE1/4SW1/4, S1/2SE1/4	Willamette
PD	Josephine	34S	7W	30	E1/2SE1/4	Willamette
O&C	Josephine	34S	7W	31	N1/2NE1/4, SW1/4NE1/4	Willamette
O&C	Josephine	34S	8W	15	N1/2NE1/4, W1/2NW1/4, SE1/4NW1/4, N1/2SW1/4, S1/2SE1/4	Willamette
O&C	Josephine	34S	8W	16	E1/2NE1/4, NE1/4SE1/4	Willamette
O&C	Josephine	34S	8W	21	S1/2NE1/4, N1/2SE1/4	Willamette
O&C	Josephine	34S	8W	22	N1/2NE1/4, SE1/4SW1/4, SE1/4	Willamette
O&C	Josephine	34S	8W	23	Lot 7,8, W1/2NW1/4, SW1/4SW1/4	Willamette
O&C	Josephine	34S	8W	26	W1/2NW1/4	Willamette
O&C	Josephine	34S	8W	27	NE1/4NE1/4, NE1/4NW1/4	Willamette

Species Totals

Species	Net	Gross Merch	Gross	# of Merch Logs	# of Cull Logs	# of Trees
Douglas Fir	6,732.0	7,977.0	8,285.0	47,963	6,057	10,396
Ponderosa Pine	357.0	423.0	431.0	1,726	268	324
White Fir	260.0	306.0	313.0	1,798	253	347
Sugar Pine	166.0	184.0	209.0	705	461	245
Incense-cedar	1.0	1.0	1.0	18	0	8
Totals	**7,516.0**	**8,891.0**	**9,239.0**	**52,210**	**7,039**	**11,320**

Cutting Area Acres

Regeneration Harvest Acres	Partial Cut Acres	Right of Way Acres	Total Acres	Net Volume per Acre
0.0	240.0	3.0	243.0	30.9

Logging Costs

Stump to Truck	$1,803,157.89
Transportation	$531,770.71
Road Construction	$307,013.03
Maintenance/Rockwear	$202,366.20
Road Use	$0.00
Other Allowances	$79,797.74
Total:	**$2,924,105.57**
Total Logging Cost per MBF:	**$389.05**

Utilization Centers

Location	Distance	% of Net Volume
White City	59.0 miles	100 %

Profit & Risk

Profit	11 %
Risk	2 %
Total Profit & Risk	**13 %**

Tract Features

Quadratic Mean DBH	24.2 in
Average GM Log	170 bf
Average Volume per Acre	30.9 mbf
Recovery	81 %
Net MBF volume:	
Green	7,516.0 mbf
Salvage	0 mbf
Export	0 mbf
Ground Base Logging:	
Percent of Sale Volume	37 %
Average Yarding Slope	25 %
Average Yarding Distance	170 ft
Cable Logging:	
Percent of Sale Volume	63 %
Average Yarding Slope	65 %
Average Yarding Distance	120 ft
Aerial Logging:	
Percent of Sale Volume	0 %
Average Yarding Slope	0 %
Average Yarding Distance	0 ft

Cruise

Cruise Completed	May 2023
Cruised By	Caulfield, Cannon, Darner

Cruise Method

The Rum Creek Hazard timber sale was cruised using the PCMTRE and 3P cruise methods. The 240 acres of PCMTRE were cruised using a 40BAF and a 1 in 8 sampling frequency on 154 plots installed in a grid pattern. The 3 acres of roadside blue mark units were cruised using the 3P cruise method resulting in 12 sample trees (9 Douglas fir, 1 ponderosa pine, 1 sugar pine and 1 incense cedar).

Stumpage Computation

Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Stumpage Adjustment	Appraised Price/MBF		Appraised Value ($)
Douglas Fir	10,396	6,732.0	$566.12	$73.60	$389.05	$1.98	($24.32)	$81.10		$545,965.20
Ponderosa Pine	324	357.0	$182.19	$23.68	$389.05	$0.00	$0.00	$18.30	*	$6,533.10
White Fir	347	260.0	$343.05	$44.60	$389.05	$0.00	$0.00	$34.40	*	$8,944.00
Sugar Pine	245	166.0	$174.15	$22.64	$389.05	$0.00	$0.00	$17.50	*	$2,905.00
Incense-cedar	8	1.0	$360.00	$46.80	$389.05	$0.00	$0.00	$36.00	*	$36.00
Totals	**11,320**	**7,516.0**								**$564,383.30**

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

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		1.0 %	14.0 %	62.0 %	22.0 %	1.0 %	

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine			18.0 %	68.0 %	14.0 %		

Species	Peeler	No. 1 Sawmill	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
White Fir				81.0 %	19.0 %		

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine				82.0 %	18.0 %		

Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar					70.0 %	30.0 %	

Marginal Log Volume By Grade

Species	Utility Cull	Peeler Cull
Douglas Fir	0	106

Unit: 5-1

Net Volume/Acre: 30.3 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	190.0	225.0	233.0	287
Ponderosa Pine	10.0	11.0	12.0	7
White Fir	8.0	9.0	9.0	10
Sugar Pine	4.0	5.0	6.0	6
Totals:	**212.0**	**250.0**	**260.0**	**310**

Regeneration Harvest	0.0
Partial Cut	7.0
Right of Way	0.0
Total Acres:	**7.0**

Unit: 6-1

Net Volume/Acre: 30.0 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	54.0	64.0	67.0	82
Ponderosa Pine	3.0	3.0	3.0	2
White Fir	2.0	3.0	3.0	3
Sugar Pine	1.0	1.0	2.0	2
Totals:	**60.0**	**71.0**	**75.0**	**89**

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

Unit: 6-3

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	136.0	160.0	167.0	205
Ponderosa Pine	7.0	8.0	8.0	5
White Fir	5.0	6.0	6.0	7
Sugar Pine	3.0	4.0	4.0	4
Totals:	**151.0**	**178.0**	**185.0**	**221**

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

Unit: 7-1

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	1,166.0	1,380.0	1,433.0	1,758
Ponderosa Pine	59.0	72.0	70.0	40
White Fir	46.0	55.0	56.0	65
Sugar Pine	28.0	29.0	33.0	39
Totals:	**1,299.0**	**1,536.0**	**1,592.0**	**1,902**

Regeneration Harvest	0.0
Partial Cut	43.0
Right of Way	0.0
Total Acres:	**43.0**

Unit: 7-2

Net Volume/Acre: 30.0 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	27.0	32.0	33.0	41
White Fir	1.0	1.0	1.0	1
Sugar Pine	1.0	1.0	1.0	1
Ponderosa Pine	1.0	2.0	2.0	1
Totals:	**30.0**	**36.0**	**37.0**	**44**

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

Unit: 7-3

Net Volume/Acre: 30.0 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	54.0	64.0	67.0	82
Ponderosa Pine	3.0	3.0	3.0	2
White Fir	2.0	3.0	3.0	3
Sugar Pine	1.0	1.0	2.0	2
Totals:	**60.0**	**71.0**	**75.0**	**89**

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

Unit: 7-4

Net Volume/Acre: 30.3 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	190.0	225.0	233.0	287
Ponderosa Pine	10.0	11.0	12.0	7
White Fir	8.0	9.0	9.0	10
Sugar Pine	4.0	5.0	6.0	6
Totals:	**212.0**	**250.0**	**260.0**	**310**

Regeneration Harvest	0.0
Partial Cut	7.0
Right of Way	0.0
Total Acres:	**7.0**

Unit: 7-5

Net Volume/Acre: 30.0 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	27.0	32.0	33.0	41
White Fir	1.0	1.0	1.0	1
Sugar Pine	1.0	1.0	1.0	1
Ponderosa Pine	1.0	2.0	2.0	1
Totals:	**30.0**	**36.0**	**37.0**	**44**

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

Unit: 15-2

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	678.0	802.0	833.0	1,024
Ponderosa Pine	34.0	41.0	42.0	25
White Fir	27.0	32.0	33.0	36
Sugar Pine	16.0	18.0	20.0	22
Totals:	**755.0**	**893.0**	**928.0**	**1,107**

Regeneration Harvest	0.0
Partial Cut	25.0
Right of Way	0.0
Total Acres:	**25.0**

Unit: 15-3

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	54.0	64.0	67.0	82
Ponderosa Pine	3.0	3.0	3.0	2
White Fir	2.0	3.0	3.0	3
Sugar Pine	1.0	1.0	2.0	2
Totals:	**60.0**	**71.0**	**75.0**	**89**

Net Volume/Acre: 30.0 MBF

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

Unit: 15-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	108.0	128.0	133.0	164
Ponderosa Pine	6.0	7.0	7.0	4
White Fir	4.0	5.0	5.0	6
Sugar Pine	3.0	3.0	3.0	4
Totals:	**121.0**	**143.0**	**148.0**	**178**

Net Volume/Acre: 30.3 MBF

Regeneration Harvest	0.0
Partial Cut	4.0
Right of Way	0.0
Total Acres:	**4.0**

Unit: 15-5

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	271.0	321.0	333.0	410
Ponderosa Pine	14.0	16.0	17.0	10
White Fir	11.0	13.0	13.0	14
Sugar Pine	6.0	7.0	8.0	9
Totals:	**302.0**	**357.0**	**371.0**	**443**

Net Volume/Acre: 30.2 MBF

Regeneration Harvest	0.0
Partial Cut	10.0
Right of Way	0.0
Total Acres:	**10.0**

Unit: 16-1

Net Volume/Acre: 30.0 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	27.0	32.0	33.0	41
White Fir	1.0	1.0	1.0	1
Sugar Pine	1.0	1.0	1.0	1
Ponderosa Pine	1.0	2.0	2.0	1
Totals:	**30.0**	**36.0**	**37.0**	**44**

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

Unit: 17-1

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	787.0	931.0	966.0	1,188
Ponderosa Pine	40.0	47.0	48.0	29
White Fir	31.0	37.0	38.0	42
Sugar Pine	18.0	20.0	23.0	26
Totals:	**876.0**	**1,035.0**	**1,075.0**	**1,285**

Regeneration Harvest	0.0
Partial Cut	29.0
Right of Way	0.0
Total Acres:	**29.0**

Unit: 21-1

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	271.0	321.0	333.0	410
Ponderosa Pine	14.0	16.0	17.0	10
White Fir	11.0	13.0	13.0	14
Sugar Pine	6.0	7.0	8.0	9
Totals:	**302.0**	**357.0**	**371.0**	**443**

Regeneration Harvest	0.0
Partial Cut	10.0
Right of Way	0.0
Total Acres:	**10.0**

Unit: 22-1

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	868.0	1,027.0	1,066.0	1,311
Ponderosa Pine	44.0	52.0	53.0	31
White Fir	35.0	41.0	42.0	46
Sugar Pine	20.0	23.0	26.0	29
Totals:	**967.0**	**1,143.0**	**1,187.0**	**1,417**

Regeneration Harvest	0.0
Partial Cut	32.0
Right of Way	0.0
Total Acres:	**32.0**

Unit: 22-2

Net Volume/Acre: 30.3 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	217.0	257.0	267.0	328
Ponderosa Pine	11.0	13.0	13.0	8
White Fir	9.0	10.0	10.0	12
Sugar Pine	5.0	6.0	6.0	7
Totals:	**242.0**	**286.0**	**296.0**	**355**

Regeneration Harvest	0.0
Partial Cut	8.0
Right of Way	0.0
Total Acres:	**8.0**

Unit: 23-1

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	244.0	289.0	300.0	369
Ponderosa Pine	12.0	15.0	15.0	9
White Fir	10.0	11.0	12.0	13
Sugar Pine	6.0	6.0	7.0	8
Totals:	**272.0**	**321.0**	**334.0**	**399**

Regeneration Harvest	0.0
Partial Cut	9.0
Right of Way	0.0
Total Acres:	**9.0**

Unit: 26-1

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	136.0	160.0	167.0	205
Ponderosa Pine	7.0	8.0	8.0	5
White Fir	5.0	6.0	7.0	7
Sugar Pine	3.0	4.0	4.0	4
Totals:	**151.0**	**178.0**	**186.0**	**221**

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

Unit: 27-1

Net Volume/Acre: 30.0 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	27.0	32.0	33.0	41
Sugar Pine	1.0	1.0	1.0	1
White Fir	1.0	1.0	1.0	1
Ponderosa Pine	1.0	2.0	2.0	1
Totals:	**30.0**	**36.0**	**37.0**	**44**

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

Unit: 29-1

Net Volume/Acre: 30.3 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	163.0	193.0	200.0	246
Ponderosa Pine	8.0	10.0	10.0	6
White Fir	7.0	8.0	8.0	9
Sugar Pine	4.0	4.0	5.0	5
Totals:	**182.0**	**215.0**	**223.0**	**266**

Regeneration Harvest	0.0
Partial Cut	6.0
Right of Way	0.0
Total Acres:	**6.0**

Unit: 29-2

Net Volume/Acre: 30.2 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	814.0	963.0	1,000.0	1,229
Ponderosa Pine	41.0	49.0	50.0	30
White Fir	33.0	38.0	39.0	43
Sugar Pine	19.0	21.0	24.0	27
Totals:	**907.0**	**1,071.0**	**1,113.0**	**1,329**

Regeneration Harvest	0.0
Partial Cut	30.0
Right of Way	0.0
Total Acres:	**30.0**

Unit: BM

Net Volume/Acre: 88.3 MBF

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	223.0	275.0	288.0	565
Ponderosa Pine	27.0	30.0	32.0	88
Sugar Pine	14.0	15.0	16.0	30
Incense-cedar	1.0	1.0	1.0	8
Totals:	**265.0**	**321.0**	**337.0**	**691**

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

Total Stump To Truck	Net Volume	$/MBF
$1,803,157.89	7,516.0	$239.91

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

Yarding System	Unit of Measure	# of Units of Measure	$/Unit of Measure	Total Cost	Remarks
Tractor Swing	GM MBF	1,177.0	$240.69	$283,292.13	Tractor Swing, Units 17-1 (24 acres) 22-1 (2 acres) 29-2 (7 acres)
Cable: Medium Yarder	GM MBF	4,962.0	$207.64	$1,030,309.68	
Track Skidder	GM MBF	2,752.0	$168.29	$463,134.08	
Subtotal				**$1,776,735.89**	

Additional Costs

Item	Unit of Measure	# of Units of Measure	$/Unit of Measure	Total Cost	Remarks
Deadman Anchor	Each	12.0	$450.00	$5,400.00	
Tailhold Trees	Each	23.0	$150.00	$3,450.00	Tailholds over 30 feet
Skid Construction	Hour	6.0	$98.00	$588.00	
Additional Cat Time	Hour	6.0	$98.00	$588.00	
Subtotal				**$10,026.00**	

Additional Moves

Equipment	Unit of Measure	# of Units of Measure	$/Unit of Measure	Total Cost	Remarks
Shovel	Hour	12.0	$169.00	$2,028.00	
Harvester/Forwarder	Hour	32.0	$169.00	$5,408.00	Feller Buncher and Processer
Cable: Medium Yarder	Hour	16.0	$169.00	$2,704.00	
Loader	Hour	16.0	$169.00	$2,704.00	
Track Skidder	Hour	32.0	$111.00	$3,552.00	Appraised for 2 Tracked Skidders
Subtotal				**$16,396.00**	

Total	Net Volume	$/MBF
$531,770.71	7,516.0	$70.75

Utilization Center	One Way Mileage	Description	Unit of Measure	# of Units	$/Unit of Measure	Total Cost	% of Sale Volume
White City	59.0	All Species	GM MBF	8,891.0	$59.81	$531,770.71	100 %

Comments:
Averaged mileage from McKnabe sale area and Peavine sale area.

Engineering Allowances

Total	Net Volume	$/MBF
$509,379.23	7,516.0	$67.77

Cost Item	Total Cost
Road Construction:	$307,013.03
Road Maintenance/Rockwear:	$202,366.20
Road Use Fees:	$0.00

Total	Net Volume	$/MBF
$79,797.74	7,516.0	$10.62

Environmental Protection

Cost item	Total Cost
Waterbar Corridors	$2,550.00
Waterbar Skids	$3,600.00
Barricade Skids	$1,320.00
Equipment Washing-Small	$1,000.00
Seed and Mulch	$4,800.00
Equipment Washing-Large	$1,500.00
Ripping -Landings and Skids	$2,526.00
Subtotal	**$17,296.00**

Logging

Cost item	Total Cost
Directional Falling	$2,400.74
Skid Location	$750.00
Corridor Location	$1,000.00
Landing Construction	$3,630.00
Subtotal	**$7,780.74**

Miscellaneous

Cost item	Total Cost
Fuels Adjustment for Rounding	$378.00
Subtotal	**$378.00**

Road Construction, Maintenance, Use, & Decommissioning

Cost item	Total Cost
Culvert Cleaning	$500.00
Subtotal	**$500.00**

Slash Disposal & Site Prep

Cost item	Total Cost
Lop and Scatter	$6,672.00
Cover and Burn Landing Decks	$3,136.00
Machine Pile Burn and Mop-up	$1,300.00
Handpile Burn and Mop-up	$4,050.00
Machine Pile and Cover	$9,800.00
Handpile and Cover	$28,885.00
Subtotal	**$53,843.00**

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UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Contract No.: ORM07-TS-2023.0011

Sale Name: Rum Creek Hazard

Issuing Office: Medford District

EXHIBIT B
SCALE SALE

PURCHASE PRICE SCHEDULE AND MEASUREMENT SPECIFICATIONS

I. **Timber and Other Wood Products Sold** - In accordance with Section 2 and 3, the Purchaser agrees to pay the Government for the timber and other wood products sold under the contract in accordance with the following schedule, measurement standards, and requirements. Wood products sold is comprised of Timber, Other Wood Products, and Timber and Other Wood Products Remaining as defined below. In the event an Extension of Time is approved, the prices per measurement unit may be subject to readjustment in accordance with Section 9 of the contract.

Timber Schedule		
Species	**Unit of Measure**	**Price Per Measurement Unit**
Douglas Fir	MBF	
Ponderosa Pine	MBF	$18.30
White Fir	MBF	$34.40
Sugar Pine	MBF	$17.50
Incense Cedar	MBF	$36.00
Other Wood Products Schedule		
Product/Species	**Unit of Measure**	**Price Per Measurement Unit**

The Authorized Officer shall establish unit of measure and price per measurement unit, in accordance with standard Bureau of Land Management (BLM) procedures, for any species or products not listed in this Exhibit that are cut or removed from the contract area.

II. **Timber** – Includes standing trees, downed trees or logs, or portions thereof, which can be cut into logs that equal or exceed the specifications below.

All logs defined below, which have not been reserved to Government in Section 43 of the

contract, shall be designated as timber under this contract. Logs or portions of logs which equal or exceed all the following minimum log specifications shall be considered timber sold. The Purchaser shall pay for all timber removed in accordance with Section 3 of the contract at the price per measurement unit shown in Section I of this Exhibit.

- Log or portion of a log that is:
  - One third (1/3) sound.
  - Small End Diameter Inside Bark (DIB) – Five (5) inches
  - Length – Eight (8) feet four (4) inches

III. **Other Wood Products** – Includes timber and other woody material not meeting the timber specifications above (i.e., pulp, biomass, chips, hog fuel).

If Purchaser removes any products or species which do not meet the minimum log specifications for timber in Section II, such material shall be considered other wood products. Purchaser shall pay for other wood products in accordance with Section 3 of the contract at the price per measurement unit shown in Section I of this Exhibit.

IV. **Timber and Other Woods Products Remaining -** The remaining volume of any timber or other wood products, which have not been reserved to Government in Section 43 of the contract, shall be determined as provided in Section 3(g) of the contract using specifications set forth in the table below. The Purchaser shall pay for the sum of all remaining volume in accordance with Section 3 of the contract at the unit prices shown in Section I of this Exhibit.

Hazard Trees Left Standing:	Felled Timber Not Removed
Diameter at Breast Height (DBH): 5”	Small End DIB: 11”
Log Height: 12’	Log Length: 14’
% Sound: 0%	% Sound: 33.3%
Net Tree Volume:	Net Log Volume: 20 BF

V. **Measurement Standards**

1. **Log Scaling Loads:** All species or products in Section I, with MBF as the Unit of Measure shall be designated as log scaling loads.

   a. Log scaling services shall be provided and performed by BLM Certified Scalers or BLM-authorized Third-Party Scaling Organizations (TPSO), as determined by the Authorized Officer. The Purchaser’s employees or contractors may not perform log scaling.

   b. All logs shall be scaled in Eastside Scribner Log Rules according to the Official Log Scaling and Grading Bureaus, Northwest Log Rules Eastside and Westside Log Scaling Handbook, as amended or supplemented, at the time the logs are scaled.

   c. All logs shall be scaled using an authorized BLM log scaling method approved by the Authorized Officer in accordance with BLM prescribed procedures. A list of authorized BLM log scaling methods is available upon request.

d. Purchaser shall ensure all logs are presented so that they may be scaled in an economical and safe manner.

e. Scaling deductions made for rot, check or other defect resulting from abnormal delay in scaling caused by Purchaser shall be recorded separately and charged to the Purchaser in accordance with Section 3(g) of the contract when applicable. Avoidable delay in log scaling caused by the Purchaser that results in a measurable reduction in timber volume or quality would generally be considered abnormal delay, as determined by the Authorized Officer.

f. Mechanical damage to logs that occurs during unloading identified by the TPSO will not be considered a deductible defect.

g. The BLM will conduct check scaling using the following standards:
Gross Scale - A variance of one and ½ percent (1.5%) in gross scale is the standard unless otherwise justified.
Net scale - The allowable variance is as follows:

Check scaler's percent defect in logs	Scalers allowable variance
0-10 percent	2 percent
over 10 percent	0.2 * percent defect to a maximum of 5 percent

Determinations as to volume of timber made by a BLM check scaler in conformance with the standards as set forth herein shall be final. When such checks show a variance in scale more than acceptable standards, in two or more consecutive check scales, an adjustment to the volume reported as scaled will be made by BLM. Such adjustments will be made based on the difference between available BLM check scales and the original scale during the period covered by the unsatisfactory check scales. Unless otherwise approved in writing by the Authorized Officer, the volume to which this difference will be applied will be fifty (50) percent of the volume scaled between the last satisfactory check and the first unsatisfactory check, one hundred (100) percent of the volume scaled during the unsatisfactory check, and fifty (50) percent of the volume between the last unsatisfactory check scale and the next satisfactory check scale.

2. **Weight Loads:** All species or products in Section I, with Tons as the Unit of Measure shall be designated as weight loads.

a. All weight loads shall be weighed on State certified scales.
b. Scales must have a current inspection tag or seal posted which shows the date of the most recent test by the State weights and measures agency.
c. No load shall be presented for weighing that exceeds the certified capacity of the scales in use.
d. Each load shall be weighed as a single unit. Gross and tare weight must be

machine printed on a weight receipt. Average tare weights shall not be used, unless approved by the Authorized Officer. In addition to the gross and tare weight, the following shall be recorded with each weight receipt:

- Contract name and number
- Load Ticket number
- Date, time, and location the load was weighed

VI. **Accountability**

1. Purchaser shall notify the Authorized Officer Seven 7 business days prior to starting or stopping of hauling operations performed under the contract.

2. The Purchaser must provide the following information to the Authorized Officer Seven (7) business days prior to the commencement of haul: log scaling and weighing location(s), planned beginning haul dates, anticipated number of loads per day to each scaling or weighing location, logger name and contact information, and log brands to be used, and the log brand registration number(s).

3. A Scaling Authorization Form(s) must be completed and approved by the Contracting Officer prior to beginning of hauling operations. The Scaling Authorization(s) will include approved measurement methods, merchantability standards, sort descriptions, and authorized delivery locations for all loads hauled from the contract area. For log scale loads, all log scaling locations on the Scaling Authorization(s) are required to have a Log Yard Authorization with the BLM. Approved Scaling Authorizations will be provided to the Purchaser upon request.

4. All loads will be scaled and/or weighed at locations listed on the Scaling Authorization as approved by the Authorized Officer.

5. Purchaser shall notify the Authorized Officer Seven (7) business days in advance to request additional log scaling and/or weighing locations for approval on the Scaling Authorization(s).

6. Purchaser shall not intermingle BLM timber and other wood products with any other timber or wood products before log scaling and/or weighing occurs.

7. All logs on timber loads will be painted and branded at the landing and accounted for accordance with Section 44 of the contract. If contract area is within a State that maintains a log brand register, brands shall be registered with the State and Purchaser shall use assigned brand(s) exclusively on logs from this contract until the Authorized Officer releases the brand(s).

8. The Authorized Officer shall issue the Purchaser serially numbered load ticket books prior to any haul operations. The Purchaser shall sign a receipt for all ticket books received. The Purchaser shall accurately complete all load receipts in accordance with

the instructions on the front of the ticket books, or as directed by the Authorized Officer. Separate load ticket books will be used for timber and other wood products. Mule train timber loads will be treated as two separate loads with a ticket for each load**.** All load tickets will be marked with the cutting area number using a permanent marker or as directed by the Authorized Officer. The Purchaser shall deliver all loads to the log scaling or weighing location on the Scaling Authorization and listed on the BLM receipt. The load receipt and BLM receipt shall remain attached to the log load until it is scaled and/or weighed. For log scale loads, attach on the bunk or wing log at the front of the load on the driver's side, and surrender the load receipt and BLM receipt to the TPSO or Authorized Officer at the scaling location. For weight loads, either attach at the front of the load on the driver's side or place on the driver's side dashboard, attach the load receipt and BLM receipt to the weight receipt and deliver to the BLM weekly, unless otherwise directed by the Authorized Officer. The Purchaser will return all used load ticket books with woods receipts still attached to the BLM at the time new books are being issued. All unused and partial load ticket books, with receipts still attached, must be returned to the BLM upon completion of the contract and prior to final payment, or at the request of the Authorized Officer.

9. The Purchaser must account for all load receipts from each load ticket book. For all load receipts not accounted for, the Contracting Officer, at their sole discretion, will determine if the receipts are void or if the Purchaser shall pay damages for lost products. The value of lost products shall be equal to the highest value load for the month in which the receipt is lost. If no loads have been hauled in that month, value will be determined from the closest month in which loads were hauled. In the event a load receipt or load ticket book is lost or stolen, the Purchaser must immediately notify the Authorized Officer, and provide a complete explanation.

10. The Purchaser shall furnish BLM a map showing the route which shall be used to haul loads from the timber sale area to the log scaling/weighing location. Upon loading timber or other wood products in the contract area, all loads shall be hauled directly to the authorized scaling or weighing location as stated on the load receipt. The route of haul may be changed only with advance notice to and approval by BLM.

11. The Purchaser shall notify the Authorized Officer and receive advance authorization if any loads will arrive at an authorized scaling or weighing locations outside of their normal operating hours. No loads will be left on the truck for overnight storage without advance permission from the Authorized Officer.

12. If scaling or weighing services are unavailable, delayed or interrupted for any reason, hauling operations will cease immediately until services resume or an alternate scaling or weighing location is approved by the Authorized Officer.

13. Any removal of wood products from loaded trucks before being accounted for as required by the contract shall be considered a trespass and render the Purchaser liable for damages under applicable law in accordance with Section 13 of the contract. Any payment made for purchase of such loads shall be deducted from amount due because of trespass.

VII. **Total Estimated Purchase Price –** For administrative purposes, the following will be used for determining (1) when payments are due and (2) the value of timber or other wood products subject to any special bonding provisions in accordance with Section 3(f) of the contract.

1. When payments are made under Section 3 of the contract, the Authorized Officer shall determine the value of removed timber and other wood products using the Government's records of log scale and/or weight volumes removed from the contract area.

2. The estimated value of timber and other wood products not yet removed from the contract area will be determined by subtracting the Government's records for value of removed timber and other wood products from the estimated total purchase price as shown in the table below. The estimated Total Purchase price is calculated by multiplying the estimated volume or weight for all species/products, listed below, by the bid prices in Section 1.

Total Estimated Purchase Price for Timber and Other Wood Products			
Species/Product	**Estimated Volume (MBF or Tons)**	**Bid Price ($/MBF or $/Ton)**	**Estimated Value**
Douglas Fir	6,732 MBF		
Ponderosa Pine	357 MBF	$18.30	$6,533.10
White Fir	260 MBF	$34.40	$8,944.00
Sugar Pine	166 MBF	$17.50	$2,905.00
Incense Cedar	1 MBF	$36.00	$36.00
Total Estimated Purchase Price:			

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Version: 8.0.0.14

Summary of All Roads and Projects Updated: 11/4/2022

T.S. Contract Name: Rum Creek Hazard TS Tract No: ORM07-TS-2023.0011 Sale Date: 07-27-2023

Prepared by: Brown Ph: Print Date: 6/29/2023 10:37:13 AM
Construction: 0.00 sta
Improve: 0.00 sta Renov: 2468.41 sta Decom: 0.00 sta Temp: 26.75 sta

200 Clearing and Grubbing: 2.12 acres $9,066.12

300 Excavation: 1650 cy $20,954.86
Haul < 500 ft: 0 sta-yds
Haul > 500 ft: 1000 yd-mi

400 Drainage: $0.00
Culvert: 0.00 lf DownSpout: 0.00 lf
PolyPipe: 0.00 lf

500 Renovation: $121,826.96
Blading 41.49 mi
Slide Removal 280.00 cy

700-1200 Surfacing: $2,548.91
Hog Cr BLM Stockpile 60.00 LCY
Peavine BLM Stockpile 40.00 LCY

1300 Geotextiles: $0.00

1400 Slope Protection: $16,637.11
Gradation Class 2: 100.00 cy

1800 Soil Stabilization: 0.80 acres $1,023.57
Includes Small Quantity Factor of 1.55

1900 Cattleguards: $0.00

2100 RoadSide Brushing: $87,293.90
Manual Brushing: 46.75 miles

2300 Engineering: 0.00 sta. $0.00

2400 Minor Concrete: $0.00

2500 Gabions: $0.00

8000 Miscellaneous: $3,500.00

Mobilization: Const. $44,161.60 Surf. $0.00..... $44,161.60

Quarry Development: $0.00

Total: 7,516 mbf @ $40.848/mbf = $307,013.03

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities are loose cubic yards.

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-02.00 A-B Road Name: Angora Road
Road Renovation: 2.16 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$5,627.90
Blading 2.16 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):2.16 miles	$3,797.17
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$525.00
Mobilization: Const. $1,671.71 Surf. $0.00	$1,671.71
Quarry Development:	$0.00
Total:	$11,621.78

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-02.00 A-B Road Name: Angora Road

Section 500 Renovation:
  Blading: $923.61/mi x 2.16 mi = $1,995.00
  Scarification: $1118.88/mi x 0.50 mi = $559.44
  Compaction: $415.02/mi x 2.16 mi = $896.44
  Clean Culverts: $501.63/mi x 2.16 mi = $1,083.52
  Watering
   Water Truck 3000 Gal 10 hr x $109.35/hr = $1,093.50

Subtotal: $5,627.90

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 2.62 acres = $2,485.33
  Chipping Brush
   Brush Chipper 12 hr x $109.32/hr = $1,311.84

Subtotal: $3,797.17

Section 8000 Miscellaneous:
  HPOC Installation
   HPOC Installation 3 EA x $175.00/EA = $525.00

Subtotal: $525.00

Mobilization:
  Construction - 3.79% of total Costs = $1,671.71

Subtotal: $1,671.71

Total: $11,621.78

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-03.00 A1A2 Road Name: Coffee Pot Road
Road Renovation: 2.07 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$5,225.98
Blading 2.07 mi	
700-1200 Surfacing:	$748.38
Quarry Name: Hog Cr BLM Stockpile 20.00 LCY	
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):2.07 miles	$3,387.59
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$700.00
Mobilization: Const. $1,690.50 Surf. $0.00	$1,690.50
Quarry Development:	$0.00
Total:	$11,752.45

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-03.00 A1A2 Road Name: Coffee Pot Road

Section 500 Renovation:
  Blading: $923.61/mi x 2.07 mi = $1,911.87
  Scarification: $1118.88/mi x 0.50 mi = $559.44
  Compaction: $415.02/mi x 2.07 mi = $859.09
  Clean Culverts: $501.63/mi x 2.07 mi = $1,038.37
  Watering for Compaction
   Water Truck 3000 Gal 8 hr x $107.15/hr = $857.20

Subtotal: $5,225.98

Section 700-1200 Surfacing:

Hog Cr BLM Stockpile
 Comment: M.P. 0.41

Length	TopW	BotW	Depth	CWid	#TOs	Width	F.W.L	Taper	Other
									20 LCY

  Rock Volume = 20.00 LCY
  Production: $6.64/LCY x 20.00 LCY = $132.80
  Processing: $1.20/LCY x 20.00 LCY = $24.00
  Compaction: $1.38/LCY x 20.00 LCY = $27.60
  Grid Rolling: $3.02/LCY x 20.00 LCY = $60.40
  Basic Rock Haul cost: $1.62/LCY x 20.00 LCY = $32.40
  Rock Haul +15% grades: $2.43/LCY-mi x 20.00 LCY x 9.23 mi= $448.58
  Basic Water Haul cost: $0.79/LCY x 20.00 LCY = $15.80
  Water Haul +15% grades: $0.34/LCY-mi x 20.00 LCY x 1.00 mi= $6.80

Subtotal: $748.38

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 2.51 acres = $2,380.99
  Chipping Brush
   Brush Chipper 10 hr x $100.66/hr = $1,006.60

Subtotal: $3,387.59

Section 8000 Miscellaneous:
  HPOC Sites
   HPOC Installation 4 EA x $175.00/EA = $700.00

Subtotal: $700.00

Mobilization:
  Construction - 3.83% of total Costs = $1,690.50

Subtotal: $1,690.50

Total: $11,752.45

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-03.01 A-F Road Name: McKnabe Creek Road
Road Renovation: 7.82 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$19,234.77
Blading 7.82 mi	
Slide Removal 100.00 cy	
700-1200 Surfacing:	$907.21
Quarry Name: Hog Cr BLM Stockpile 20.00 LCY	
1300 Geotextiles:	$0.00
1400 Slope Protection:	$16,637.11
Gradation Class 2: 100.00 cy	
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):7.82 miles	$16,378.26
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$525.00
Mobilization: Const. $9,019.16 Surf. $0.00	$9,019.16
Quarry Development:	$0.00
Total:	$62,701.51

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-03.01 A-F Road Name: McKnabe Creek Road

Section 500 Renovation:
 Comment: Slide removal includes all slides
  Slide Removal 100.00 cy
  Dump Truck: $103.09/hr x 10.00 hr = $1,030.90
  Grader: $184.36/hr x 3.00 hr = $553.08
  Backhoe: $108.79/hr x 10.00 hr = $1,087.90
  Blading: $923.61/mi x 4.43 mi = $4,091.59
  Scarification: $1118.88/mi x 1.50 mi = $1,678.32
  Blading w/o Ditches: $559.44/mi x 3.39 mi = $1,896.50
  Compaction: $415.02/mi x 7.82 mi = $3,245.46
  Clean Culverts: $501.63/mi x 4.43 mi = $2,222.22
  Watering
   Water Truck 3000 Gal 32 hr x $107.15/hr = $3,428.80
                                                Subtotal: $19,234.77

Section 700-1200 Surfacing:

Hog Cr BLM Stockpile
 Comment: M.P. 0.91

Length	TopW	BotW	Depth	CWid	#TOs	Width	F.W.L	Taper	Other
									20 LCY

  Rock Volume = 20.00 LCY
  Production: $6.64/LCY x 20.00 LCY = $132.80
  Processing: $1.20/LCY x 20.00 LCY = $24.00
  Compaction: $1.38/LCY x 20.00 LCY = $27.60
  Grid Rolling: $3.02/LCY x 20.00 LCY = $60.40
  Basic Rock Haul cost: $1.62/LCY x 20.00 LCY = $32.40
  Rock Haul +15% grades: $2.43/LCY-mi x 20.00 LCY x 12.21 mi= $593.41
  Basic Water Haul cost: $0.79/LCY x 20.00 LCY = $15.80
  Water Haul +15% grades: $0.34/LCY-mi x 20.00 LCY x 3.06 mi= $20.81
                                                Subtotal: $907.21

Section 1400 Slope Protection:
 Comment: Fill Slope Repair @ MP 0.91
  Rock Source: Robco Riprap
  Purchase Price / Royalty: $30.00/cy x 100.00cy = $3,000.00
  Furnish Class 2 type rock
  Basic Rock Haul cost: $1.63/cy x 100.00cy = $163.00
  Rock Haul +15% grades: $2.44/cy-mi x 100.00cy x 3.00 mi= $732.00
  Rock Haul -15% grades: $1.22/cy-mi x 100.00cy x 14.00 mi= $1,708.00
  Rock Haul St& Co Roads: $0.54/cy-mi x 100.00cy x 16.00 mi= $864.00
  Placement on Fill slopes: 100.00cy x ($3.57/cy x 1.03) = $367.71
  Fill Shoulder Repair MP 0.91
   Excavator - Large (3 CY) 24 hr x $152.97/hr = $3,671.28
   Dump Truck 10 cy   24 hr x $100.89/hr = $2,421.36
   Vibratory roller, Steel Drum 16 hr x $124.71/hr = $1,995.36
   Water Truck 3000 Gal 16 hr x $107.15/hr = $1,714.40
                                                Subtotal: $16,637.11

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 7.00 acres = $6,640.20
  RoadSide Brushing Heavy: $1897.20/acre x 2.48 acres = $4,705.06
  Chipping Brush
   Brush Chipper - Medium Sections 30 hr x $100.66/hr = $3,019.80
   Brush Chipper - Heavy Sections 20 hr x $100.66/hr = $2,013.20
                                                Subtotal: $16,378.26

Road Number: 34-7-03.01 A-F McKnabe Creek Road Continued

Section 8000 Miscellaneous:
  HPOC Sites
   HPOC Installation 3 EA x $175.00/EA = $525.00

Subtotal: $525.00

Mobilization:
  Construction - 20.42% of total Costs = $9,019.16

Subtotal: $9,019.16

Total: $62,701.51

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-05.01 Road Name: McKnabe B Spur
Road Renovation: 1.89 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$4,194.89
Blading 1.89 mi	
Slide Removal 40.00 cy	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):1.89 miles	$3,178.89
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $1,238.87 Surf. $0.00	$1,238.87
Quarry Development:	$0.00
Total:	$8,612.65

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-05.01 Road Name: McKnabe B Spur

Section 500 Renovation:
  Slide Removal 40.00 cy
  Dump Truck: $103.09/hr x 4.00 hr = $412.36
  Grader: $184.36/hr x 2.00 hr = $368.72
  Backhoe: $108.79/hr x 4.00 hr = $435.16
  Scarification: $1118.88/mi x 0.25 mi = $279.72
  Blading w/o Ditches: $559.44/mi x 1.89 mi = $1,057.34
  Compaction: $415.02/mi x 1.89 mi = $784.39
  Watering
   Water Truck 3000 Gal 8 hr x $107.15/hr = $857.20

Subtotal: $4,194.89

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 2.29 acres = $2,172.29
  Chipping Brush
   Brush Chipper 10 hr x $100.66/hr = $1,006.60

Subtotal: $3,178.89

Mobilization:
  Construction - 2.81% of total Costs = $1,238.87

Subtotal: $1,238.87

Total: $8,612.65

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-05.02 Road Name: McKnabe D Spur
Road Renovation: 0.95 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$1,354.34
Blading 0.95 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.95 miles	$2,465.33
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $641.74 Surf. $0.00	$641.74
Quarry Development:	$0.00
Total:	$4,461.41

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-05.02 Road Name: McKnabe D Spur

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 0.95 mi = $531.47
  Compaction: $415.02/mi x 0.95 mi = $394.27
  Watering
   Water Truck 3000 Gal 4 hr x $107.15/hr = $428.60

Subtotal: $1,354.34

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 0.55 acres = $521.73
  RoadSide Brushing Heavy: $1897.20/acre x 0.60 acres = $1,138.32
  Chiping Brush
   Brush Chipper - Medium Section 3 hr x $100.66/hr = $301.98
   Brush Chipper - Heavy Section 5 hr x $100.66/hr = $503.30

Subtotal: $2,465.33

Mobilization:
  Construction - 1.45% of total Costs = $641.74

Subtotal: $641.74

Total: $4,461.41

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-07.02 A Road Name: McKnabe Spur
Road Renovation: 0.11 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$214.34
Blading 0.11 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.11 miles	$223.98
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $73.64 Surf. $0.00	$73.64
Quarry Development:	$0.00
Total:	$511.96

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-07.02 A Road Name: McKnabe Spur

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 0.11 mi = $61.54
  Compaction: $415.02/mi x 0.11 mi = $45.65
  Watering
   Water Truck 3000 Gal 1 hr x $107.15/hr = $107.15

Subtotal: $214.34

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 0.13 acres = $123.32
  Chipping Brush
   Brush Chipper 1 hr x $100.66/hr = $100.66

Subtotal: $223.98

Mobilization:
  Construction - 0.17% of total Costs = $73.64

Subtotal: $73.64

Total: $511.96

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-15.04 Road Name: Hogtie
Road Renovation: 0.1 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$293.38
Blading 0.10 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.10 miles	$223.15
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $86.78 Surf. $0.00	$86.78
Quarry Development:	$0.00
Total:	$603.31

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-15.04 Road Name: Hogtie

Section 500 Renovation:
  Blading: $923.61/mi x 0.10 mi = $92.36
  Compaction: $415.02/mi x 0.10 mi = $41.50
  Clean Culverts: $501.63/mi x 0.10 mi = $50.16
  Watering
   Water Truck 3000 Gal 1 hr x $109.35/hr = $109.35

Subtotal: $293.38

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 0.12 acres = $113.83
  Chipping Brush
   Brush Chipper 1 hr x $109.32/hr = $109.32

Subtotal: $223.15

Mobilization:
  Construction - 0.20% of total Costs = $86.78

Subtotal: $86.78

Total: $603.31

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-21.06 A-C Road Name: Upper Stratton Spur
Road Renovation: 2.86 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$7,108.38
Blading 2.86 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):2.86 miles	$6,526.96
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$700.00
Mobilization: Const. $2,408.48 Surf. $0.00	$2,408.48
Quarry Development:	$0.00
Total:	$16,743.83

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-21.06 A-C Road Name: Upper Stratton Spur

Section 500 Renovation:
  Blading: $923.61/mi x 2.86 mi = $2,641.52
  Scarification: $1118.88/mi x 0.50 mi = $559.44
  Compaction: $415.02/mi x 2.86 mi = $1,186.96
  Clean Culverts: $501.63/mi x 2.86 mi = $1,434.66
  Watering
   Water Truck 3000 Gal 12 hr x $107.15/hr = $1,285.80

Subtotal: $7,108.38

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 2.50 acres = $2,371.50
  RoadSide Brushing Heavy: $1897.20/acre x 0.97 acres = $1,840.28
  Chipping Brush
   Brush Chipper - Medium 13 hr x $100.66/hr = $1,308.58
   Brush Chipper - Heavy 10 hr x $100.66/hr = $1,006.60

Subtotal: $6,526.96

Section 8000 Miscellaneous:
  HPOC Installation
   HPOC Installation 4 EA x $175.00/EA = $700.00

Subtotal: $700.00

Mobilization:
  Construction - 5.45% of total Costs = $2,408.48

Subtotal: $2,408.48

Total: $16,743.83

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-22.00 A-B Road Name: Hog Butte S Spur
Road Renovation: 0.29 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$747.98
Blading 0.29 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.29 miles	$533.33
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $215.27 Surf. $0.00	$215.27
Quarry Development:	$0.00
Total:	$1,496.58

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-22.00 A-B Road Name: Hog Butte S Spur

Section 500 Renovation:
  Blading: $923.61/mi x 0.29 mi = $267.85
  Compaction: $415.02/mi x 0.29 mi = $120.36
  Clean Culverts: $501.63/mi x 0.29 mi = $145.47
  Watering
   Water Truck 3000 Gal 2 hr x $107.15/hr = $214.30

Subtotal: $747.98

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 0.35 acres = $332.01
  Chipping Brush
   Brush Chipper 2 hr x $100.66/hr = $201.32

Subtotal: $533.33

Mobilization:
  Construction - 0.49% of total Costs = $215.27

Subtotal: $215.27

Total: $1,496.58

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-29.02 Road Name: Maple Ridge
Road Renovation: 2.08 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation: Standard cy	$16,585.56
Haul > 500 ft: 1,000.00 yd-mi	
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$6,258.37
Blading 2.08 mi	
Slide Removal 20.00 cy	
700-1200 Surfacing:	$483.02
Quarry Name: Hog Cr BLM Stockpile 20.00 LCY	
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):2.08 miles	$5,096.75
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $4,775.46 Surf. $0.00	$4,775.46
Quarry Development:	$0.00
Total:	$33,199.16

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-29.02 Road Name: Maple Ridge

Section 300 Excavation:
  Excavation - Common: $2.66/cy x 500.00 cy = $1,330.00
  Excavation - Rippable: $5.31/cy x 250.00 cy = $1,327.50
  Excavation - Solid: $7.41/cy x 250.00 cy = $1,852.50
  Embankment Placement & Compaction 306.f - Common: $0.39/cy x 500.00 cy = $195.00
  Embankment Placement & Compaction 306.f - Rock: $0.39/cy x 500.00 cy = $195.00
  Embankment Placement & Compaction 306.a - Common: $1.16/cy x 500.00 cy = $580.00
  Embankment Placement & Compaction 306.a - Rock: $1.09/cy x 500.00 cy = $545.00
  End Hauling > 500 ft and 10 mph: $2.44/yd-mi x 1,000.00 yd-mi = $2,440.00
  Road Widening Where Needed
   Excavator - Large (3 CY) 24 hr x $166.61/hr = $3,998.64
   Dump Truck 10 cy 24 hr x $103.09/hr = $2,474.16
   Large Excavator w/Hammer Attachment 8 hr x $205.97/hr = $1,647.76
                                                Subtotal: $16,585.56

Section 500 Renovation:
  Slide Removal 20.00 cy
  Dump Truck: $103.09/hr x 2.00 hr = $206.18
  Grader: $184.36/hr x 1.00 hr = $184.36
  Backhoe: $108.79/hr x 2.00 hr = $217.58
  Scarification: $1118.88/mi x 0.50 mi = $559.44
  Blading w/o Ditches: $559.44/mi x 2.08 mi = $1,163.64
  Compaction: $415.02/mi x 2.08 mi = $863.24
  Clean Culverts (ea): $83.77/ea x 5 ea = $418.85
  Watering
   Water Truck 3000 Gal 12 hr x $109.35/hr = $1,312.20
  Repairing Stump Holes
   Excavator - Large (3 CY) 8 hr x $166.61/hr = $1,332.88
                                                Subtotal: $6,258.37

Section 700-1200 Surfacing:

Hog Cr BLM Stockpile
 Comment: For Burnt Out Stump Holes

Length	TopW	BotW	Depth	CWid	#TOs	Width	F.W.L	Taper	Other
									20 LCY

  Rock Volume = 20.00 LCY
  Production: $6.64/LCY x 20.00 LCY = $132.80
  Processing: $1.20/LCY x 20.00 LCY = $24.00
  Compaction: $1.38/LCY x 20.00 LCY = $27.60
  Grid Rolling: $3.02/LCY x 20.00 LCY = $60.40
  Basic Rock Haul cost: $1.62/LCY x 20.00 LCY = $32.40
  Rock Haul +15% grades: $2.43/LCY-mi x 20.00 LCY x 3.70 mi= $179.82
  Basic Water Haul cost: $0.79/LCY x 20.00 LCY = $15.80
  Water Haul +15% grades: $0.34/LCY-mi x 20.00 LCY x 1.50 mi= $10.20
                                                Subtotal: $483.02

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 1.05 acres = $996.03
  RoadSide Brushing Heavy: $1897.20/acre x 1.47 acres = $2,788.88
  Chipping Brush
   Brush Chipper - Medium 4 hr x $109.32/hr = $437.28
   Brush Chipper - Heavy 8 hr x $109.32/hr = $874.56
                                                Subtotal: $5,096.75

Mobilization:
  Construction - 10.81% of total Costs = $4,775.46

Subtotal: $4,775.46

Total: $33,199.16

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-7-36.00 K-O Road Name: Old Hog Creek Ridge
Road Renovation: 4.78 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$10,994.10
Blading 4.78 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):4.78 miles	$5,192.54
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$175.00
Mobilization: Const. $2,748.91 Surf. $0.00	$2,748.91
Quarry Development:	$0.00
Total:	$19,110.55

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-7-36.00 K-O Road Name: Old Hog Creek Ridge

Section 500 Renovation:
  Blading: $923.61/mi x 3.50 mi = $3,232.64
  Scarification: $1118.88/mi x 1.00 mi = $1,118.88
  Blading w/o Ditches: $559.44/mi x 1.28 mi = $716.08
  Compaction: $415.02/mi x 4.78 mi = $1,983.80
  Clean Culverts: $501.63/mi x 3.50 mi = $1,755.71
  Watering
   Water Truck 3000 Gal 20 hr x $109.35/hr = $2,187.00

Subtotal: $10,994.10

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 3.63 acres = $3,443.42
  Chipping Brush
   Brush Chipper 16 hr x $109.32/hr = $1,749.12

Subtotal: $5,192.54

Section 8000 Miscellaneous:
  HPOC Sites
   HPOC Installation 1 EA x $175.00/EA = $175.00

Subtotal: $175.00

Mobilization:
  Construction - 6.22% of total Costs = $2,748.91

Subtotal: $2,748.91

Total: $19,110.55

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-15.00 A Road Name: West Rum Creek Road
Road Renovation: 1.11 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$2,858.16
Blading 1.11 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):1.11 miles	$1,884.57
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $796.82 Surf. $0.00	$796.82
Quarry Development:	$0.00
Total:	$5,539.55

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-15.00 A Road Name: West Rum Creek Road

Section 500 Renovation:
  Blading: $923.61/mi x 1.11 mi = $1,025.21
  Scarification: $1118.88/mi x 0.25 mi = $279.72
  Compaction: $415.02/mi x 1.11 mi = $460.67
  Clean Culverts: $501.63/mi x 1.11 mi = $556.81
  Watering
   Water Truck 3000 Gal 5 hr x $107.15/hr = $535.75

Subtotal: $2,858.16

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 1.35 acres = $1,280.61
  Chipping Brush
   Brush Chipper 6 hr x $100.66/hr = $603.96

Subtotal: $1,884.57

Mobilization:
  Construction - 1.80% of total Costs = $796.82

Subtotal: $796.82

Total: $5,539.55

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-21.00 A-B Road Name: Peavine Lookout
Road Renovation: 0.28 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$603.44
Blading 0.28 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.28 miles	$811.75
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $237.76 Surf. $0.00	$237.76
Quarry Development:	$0.00
Total:	$1,652.95

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-21.00 A-B Road Name: Peavine Lookout

Section 500 Renovation:
  Scarification: $1118.88/mi x 0.10 mi = $111.89
  Blading w/o Ditches: $559.44/mi x 0.28 mi = $156.64
  Compaction: $415.02/mi x 0.28 mi = $116.21
  Watering
   Water Truck 3000 Gal 2 hr x $109.35/hr = $218.70

Subtotal: $603.44

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 0.17 acres = $161.26
  RoadSide Brushing Heavy: $1897.20/acre x 0.17 acres = $322.52
  Chipping Brush
   Brush Chipper 3 hr x $109.32/hr = $327.96

Subtotal: $811.75

Mobilization:
  Construction - 0.54% of total Costs = $237.76

Subtotal: $237.76

Total: $1,652.95

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-21.03 Road Name: Peavine C Spur
Road Renovation: 0.13 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$236.03
Blading 0.13 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.13 miles	$389.39
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $105.08 Surf. $0.00	$105.08
Quarry Development:	$0.00
Total:	$730.49

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-21.03 Road Name: Peavine C Spur

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 0.13 mi = $72.73
  Compaction: $415.02/mi x 0.13 mi = $53.95
  Watering
   Water Truck 3000 Gal 1 hr x $109.35/hr = $109.35

Subtotal: $236.03

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Heavy: $1897.20/acre x 0.09 acres = $170.75
  Chipping Brush
   Brush Chipper 2 hr x $109.32/hr = $218.64

Subtotal: $389.39

Mobilization:
  Construction - 0.24% of total Costs = $105.08

Subtotal: $105.08

Total: $730.49

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-22.01 B-C Road Name: North Ridge
Road Renovation: 1.09 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$2,292.89
Blading 1.09 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):1.09 miles	$1,908.07
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $705.80 Surf. $0.00	$705.80
Quarry Development:	$0.00
Total:	$4,906.77

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-22.01 B-C Road Name: North Ridge

Section 500 Renovation:
  Blading: $923.61/mi x 0.79 mi = $729.65
  Blading w/o Ditches: $559.44/mi x 0.30 mi = $167.83
  Compaction: $415.02/mi x 1.09 mi = $452.37
  Clean Culverts: $501.63/mi x 0.79 mi = $396.29
  Watering
   Water Truck 3000 Gal 5 hr x $109.35/hr = $546.75

Subtotal: $2,292.89

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 1.32 acres = $1,252.15
  Chipping Brush
   Brush Chipper 6 hr x $109.32/hr = $655.92

Subtotal: $1,908.07

Mobilization:
  Construction - 1.60% of total Costs = $705.80

Subtotal: $705.80

Total: $4,906.77

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-22.02 Road Name: Bailey Creek Road
Road Renovation: 0.62 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$932.22
Blading 0.62 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.62 miles	$1,148.73
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $349.62 Surf. $0.00	$349.62
Quarry Development:	$0.00
Total:	$2,430.56

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-22.02 Road Name: Bailey Creek Road

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 0.62 mi = $346.85
  Compaction: $415.02/mi x 0.62 mi = $257.31
  Watering
   Water Truck 3000 Gal 3 hr x $109.35/hr = $328.05

Subtotal: $932.22

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 0.75 acres = $711.45
  Chipping Brush
   Brush Chipper 4 hr x $109.32/hr = $437.28

Subtotal: $1,148.73

Mobilization:
  Construction - 0.79% of total Costs = $349.62

Subtotal: $349.62

Total: $2,430.56

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-22.03 Road Name: Rocky Gulch
Road Renovation: 0.56 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$2,097.28
Blading 0.56 mi	
700-1200 Surfacing:	$217.30
Quarry Name: Peavine Stockpile 20.00 LCY	
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.56 miles	$973.01
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $552.35 Surf. $0.00	$552.35
Quarry Development:	$0.00
Total:	$3,839.93

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-22.03 Road Name: Rocky Gulch

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 0.56 mi = $313.29
  Compaction: $415.02/mi x 0.56 mi = $232.41
  Watering
   Water Truck 3000 Gal 2 hr x $109.35/hr = $218.70
  Fire rehab debris removal
   Excavator - Large (3 CY) 4 hr x $166.61/hr = $666.44
  Repairing Stump Holes
   Excavator - Large (3 CY) 4 hr x $166.61/hr = $666.44

Subtotal: $2,097.28

Section 700-1200 Surfacing:

Peavine BLM Stockpile

Length	TopW	BotW	Depth	CWid	#TOs	Width	F.W.L	Taper	Other
									20 LCY

  Rock Volume = 20.00 LCY
  Processing: $1.20/LCY x 20.00 LCY = $24.00
  Compaction: $1.38/LCY x 20.00 LCY = $27.60
  Grid Rolling: $3.02/LCY x 20.00 LCY = $60.40
  Basic Rock Haul cost: $1.62/LCY x 20.00 LCY = $32.40
  Rock Haul +15% grades: $2.43/LCY-mi x 20.00 LCY x 1.50 mi= $72.90

Subtotal: $217.30

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 0.68 acres = $645.05
  Chipping Brush
   Brush Chipper 3 hr x $109.32/hr = $327.96

Subtotal: $973.01

Mobilization:
  Construction - 1.25% of total Costs = $552.35

Subtotal: $552.35

Total: $3,839.93

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-27.01 Road Name: Median
Road Renovation: 0.66 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$971.19
Blading 0.66 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):0.66 miles	$2,283.00
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $546.74 Surf. $0.00	$546.74
Quarry Development:	$0.00
Total:	$3,800.93

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-27.01 Road Name: Median

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 0.66 mi = $369.23
  Compaction: $415.02/mi x 0.66 mi = $273.91
  Watering
   Water Truck 3000 Gal 3 hr x $109.35/hr = $328.05

Subtotal: $971.19

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Heavy: $1897.20/acre x 0.80 acres = $1,517.76
  Chipping Brush
   Brush Chipper 7 hr x $109.32/hr = $765.24

Subtotal: $2,283.00

Mobilization:
  Construction - 1.24% of total Costs = $546.74

Subtotal: $546.74

Total: $3,800.93

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-28.00 B Road Name: Mt. Peavine
Road Renovation: 1.25 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$1,764.83
Blading 1.25 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):1.25 miles	$2,207.11
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $667.32 Surf. $0.00	$667.32
Quarry Development:	$0.00
Total:	$4,639.26

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-28.00 B Road Name: Mt. Peavine

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 1.25 mi = $699.30
  Compaction: $415.02/mi x 1.25 mi = $518.78
  Watering
   Water Truck 3000 Gal 5 hr x $109.35/hr = $546.75

Subtotal: $1,764.83

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 1.52 acres = $1,441.87
  Chipping Brush
   Brush Chipper 7 hr x $109.32/hr = $765.24

Subtotal: $2,207.11

Mobilization:
  Construction - 1.51% of total Costs = $667.32

Subtotal: $667.32

Total: $4,639.26

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 34-8-34.00 A-B Road Name: Rum Creek Road
Road Renovation: 5.26 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$13,342.32
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):5.26 miles	$9,071.87
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $3,765.80 Surf. $0.00	$3,765.80
Quarry Development:	$0.00
Total:	$26,179.99

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 34-8-34.00 A-B Road Name: Rum Creek Road

Section 500 Renovation:
  Clean Culverts: $501.63/mi x 5.26 mi = $2,638.57
  Watering
   Water Truck 3000 Gal 5 hr x $107.15/hr = $535.75
  Cleaning Ditches/Haul on BST
   Motor Grader 14M 32 hr x $170.72/hr = $5,463.04
   Dump Truck 10 cy   24 hr x $100.89/hr = $2,421.36
   Backhoe 24 hr x $95.15/hr = $2,283.60

Subtotal: $13,342.32

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 6.38 acres = $6,052.07
  Chipping Brush
   Brush Chipper 30 hr x $100.66/hr = $3,019.80

Subtotal: $9,071.87

Mobilization:
  Construction - 8.53% of total Costs = $3,765.80

Subtotal: $3,765.80

Total: $26,179.99

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 35-7-11.00 C3-F Road Name: Hog Creek Road
Road Renovation: 2.77 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$6,942.76
Blading 2.77 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):2.77 miles	$4,797.86
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$175.00
Mobilization: Const. $2,001.94 Surf. $0.00	$2,001.94
Quarry Development:	$0.00
Total:	$13,917.56

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 35-7-11.00 C3-F Road Name: Hog Creek Road

Section 500 Renovation:
  Blading: $923.61/mi x 2.77 mi = $2,558.40
  Scarification: $1118.88/mi x 0.50 mi = $559.44
  Compaction: $415.02/mi x 2.77 mi = $1,149.61
  Clean Culverts: $501.63/mi x 2.77 mi = $1,389.52
  Watering
   Water Truck 3000 Gal 12 hr x $107.15/hr = $1,285.80

Subtotal: $6,942.76

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 3.36 acres = $3,187.30
  Chipping Brush
   Brush Chipper 16 hr x $100.66/hr = $1,610.56

Subtotal: $4,797.86

Section 8000 Miscellaneous:
  HPOC Sites
   HPOC Installation 1 EA x $175.00/EA = $175.00

Subtotal: $175.00

Mobilization:
  Construction - 4.53% of total Costs = $2,001.94

Subtotal: $2,001.94

Total: $13,917.56

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 35-7-11.00 G-I Road Name: Hog Creek Road
Road Renovation: 5.84 mi 16 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$17,478.20
Blading 5.84 mi	
Slide Removal 120.00 cy	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):5.84 miles	$9,735.89
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$525.00
Mobilization: Const. $4,660.44 Surf. $0.00	$4,660.44
Quarry Development:	$0.00
Total:	$32,399.52

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 35-7-11.00 G-I Road Name: Hog Creek Road

Section 500 Renovation:
  Slide Removal 120.00 cy
  Dump Truck: $103.09/hr x 10.00 hr = $1,030.90
  Grader: $184.36/hr x 5.00 hr = $921.80
  Backhoe: $108.79/hr x 10.00 hr = $1,087.90
  Blading: $923.61/mi x 5.84 mi = $5,393.88
  Scarification: $1118.88/mi x 1.00 mi = $1,118.88
  Compaction: $415.02/mi x 5.84 mi = $2,423.72
  Clean Culverts: $501.63/mi x 5.84 mi = $2,929.52
  Watering
   Water Truck 3000 Gal 24 hr x $107.15/hr = $2,571.60
Subtotal: $17,478.20

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 7.08 acres = $6,716.09
  Chipping Brush
   Brush Chipper 30 hr x $100.66/hr = $3,019.80
Subtotal: $9,735.89

Section 8000 Miscellaneous:
  HPOC Installation
   HPOC Installation 3 EA x $175.00/EA = $525.00
Subtotal: $525.00

Mobilization:
  Construction - 10.55% of total Costs = $4,660.44
Subtotal: $4,660.44

Total: $32,399.52

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: 35-8-02.00 D-E Road Name: Peavine Road
Road Renovation: 2.07 mi 14 ft Subgrade 3 ft ditch

200 Clearing and Grubbing: 0.00 acres	$0.00
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$7,038.38
Blading 2.07 mi	
700-1200 Surfacing:	$193.00
Quarry Name: Peavine Stockpile 20.00 LCY	
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.00 acres	$0.00
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (Manual):2.07 miles	$5,078.71
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$175.00
Mobilization: Const. $2,097.62 Surf. $0.00	$2,097.62
Quarry Development:	$0.00
Total:	$14,582.71

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: 35-8-02.00 D-E Road Name: Peavine Road

Section 500 Renovation:
  Blading: $923.61/mi x 1.14 mi = $1,052.92
  Scarification: $1118.88/mi x 0.50 mi = $559.44
  Blading w/o Ditches: $559.44/mi x 0.93 mi = $520.28
  Compaction: $415.02/mi x 2.07 mi = $859.09
  Clean Culverts: $501.63/mi x 1.14 mi = $571.86
  Watering
   Water Truck 3000 Gal 8 hr x $109.35/hr = $874.80
  Water bar replacement
   Construct water bar 26 EA x $100.00/EA = $2,600.00

Subtotal: $7,038.38

Section 700-1200 Surfacing:

Peavine BLM Stockpile

Length	TopW	BotW	Depth	CWid	#TOs	Width	F.W.L	Taper	Other
									20 LCY

  Rock Volume = 20.00 LCY
  Processing: $1.20/LCY x 20.00 LCY = $24.00
  Compaction: $1.38/LCY x 20.00 LCY = $27.60
  Grid Rolling: $3.02/LCY x 20.00 LCY = $60.40
  Basic Rock Haul cost: $1.62/LCY x 20.00 LCY = $32.40
  Rock Haul +15% grades: $2.43/LCY-mi x 20.00 LCY x 1.00 mi= $48.60

Subtotal: $193.00

Section 2100 Roadside Brushing:
Manual Brushing
  RoadSide Brushing Medium: $948.60/acre x 1.51 acres = $1,432.39
  RoadSide Brushing Heavy: $1897.20/acre x 1.00 acres = $1,897.20
  Chipping Brush
   Brush Chipper - Medium 6 hr x $109.32/hr = $655.92
   Brush Chipper - Heavy 10 hr x $109.32/hr = $1,093.20

Subtotal: $5,078.71

Section 8000 Miscellaneous:
  HPOC Sites
   HPOC Installation 1 EA x $175.00/EA = $175.00

Subtotal: $175.00

Mobilization:
  Construction - 4.75% of total Costs = $2,097.62

Subtotal: $2,097.62

Total: $14,582.71

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: TR 07-04 Road Name:
Temporary Road: 0.15 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.71 acres	$3,419.47
300 Excavation: Standard cy	$2,443.57
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$0.00
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.30 acres	$381.93
Includes Small Quantity Factor of 1.55	
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (NONE):0.00 acres	$0.00
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $1,049.22 Surf. $0.00	$1,049.22
Quarry Development:	$0.00
Total:	$7,294.18

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: TR 07-04 Road Name:

Section 200 Clearing and Grubbing:
Clearing - Heavy (Clearing): Adjustment Factor (2.54)
16-30% (Avg Side Slopes): Adjustment Factor (0.1)
Pile and Burn (Slash): Adjustment Factor (1.28)
20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
Total Adjustment Factor:2.54 + 0.1 + 1.28 + 0.1 = 4.02
Base Cost/Acre: $1,198.05 x Adjustment Factor: 4.02 x Total Acres: 0.71 = $3,419.47
Subtotal: $3,419.47

Section 300 Excavation:
Excavation - Common: $2.66/cy x 225.00 cy = $598.50
Excavation - Rippable: $5.31/cy x 125.00 cy = $663.75
Embankment Placement & Compaction 306.f - Common: $0.39/cy x 225.00 cy = $87.75
Embankment Placement & Compaction 306.f - Rock: $0.39/cy x 125.00 cy = $48.75
Subgrade Compaction: 4 Sta/hr $34.59/sta. x 7.2 sta = $249.05
Slope Rounding: $0.40/lf x 720.00 lf = $288.00
Embankment Placement & Compaction 306.a - Common: $1.16/cy x 225.00 cy = $261.00
Embankment Placement & Compaction 306.a - Rock: $1.09/cy x 125.00 cy = $136.25
Blading without ditch: $15.35/station x 7.20 stations = $110.52
Subtotal: $2,443.57

Section 1800 Soil Stabilization:
Dry Method with Mulch: $821.09/acre x 0.30 acres = $246.33
Includes Small Quantity Factor of 1.55
+ Seed Cost: $132.00/acre x 0.30 acres = $39.60
+ Mulch Cost: $320.00/acre x 0.30 acres = $96.00
Subtotal: $381.93

Mobilization:
Construction - 2.38% of total Costs = $1,049.22
Subtotal: $1,049.22

Total: $7,294.18

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: TR 15-02-A Road Name:
Temporary Road: 0.12 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.44 acres	$1,607.78
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$1,784.38
Blading 0.12 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.15 acres	$196.06
Includes Small Quantity Factor of 1.55	
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (NONE):0.00 acres	$0.00
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $602.86 Surf. $0.00	$602.86
Quarry Development:	$0.00
Total:	$4,191.08

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: TR 15-02-A Road Name:

Section 200 Clearing and Grubbing:
   Clearing - Medium (Clearing): Adjustment Factor (1.67)
   1-15% (Avg Side Slopes): Adjustment Factor (0)
   Pile and Burn (Slash): Adjustment Factor (1.28)
   20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
   Total Adjustment Factor:1.67 + 0 + 1.28 + 0.1 = 3.05
   Base Cost/Acre: $1,198.05 x Adjustment Factor: 3.05 x Total Acres: 0.44 = $1,607.78
Subtotal: $1,607.78

Section 500 Renovation:
  Blading w/o Ditches: $559.44/mi x 0.12 mi = $67.13
  Compaction: $415.02/mi x 0.12 mi = $49.80
  Extra time - Reconstruction
   Excavator - Large (3 CY) 4 hr x $166.61/hr = $666.44
   Tractor: D7 with rippers 4 hr x $250.25/hr = $1,001.00
Subtotal: $1,784.38

Section 1800 Soil Stabilization:
  Dry Method with Mulch: $821.09/acre x 0.15 acres = $123.16
        Includes Small Quantity Factor of 1.55
        + Seed Cost: $132.00/acre x 0.15 acres = $19.80
        + Fertilizer Cost: $34.00/acre x 0.15 acres = $5.10
        + Mulch Cost: $320.00/acre x 0.15 acres = $48.00
Subtotal: $196.06

Mobilization:
  Construction - 1.37% of total Costs = $602.86
Subtotal: $602.86

Total: $4,191.08

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: TR 15-02-B Road Name:
Temporary Road: 0.15 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.56 acres	$2,113.36
300 Excavation:	$0.00
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$2,230.47
Blading 0.15 mi	
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.20 acres	$254.62
Includes Small Quantity Factor of 1.55	
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (NONE):0.00 acres	$0.00
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $772.58 Surf. $0.00	$772.58
Quarry Development:	$0.00
Total:	$5,371.03

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: TR 15-02-B Road Name:

Section 200 Clearing and Grubbing:
Clearing - Medium (Clearing): Adjustment Factor (1.67)
16-30% (Avg Side Slopes): Adjustment Factor (0.1)
Pile and Burn (Slash): Adjustment Factor (1.28)
20-40' (Avg Clearing Widths): Adjustment Factor (0.1)
Total Adjustment Factor:1.67 + 0.1 + 1.28 + 0.1 = 3.15
Base Cost/Acre: $1,198.05 x Adjustment Factor: 3.15 x Total Acres: 0.56 = $2,113.36

Subtotal: $2,113.36

Section 500 Renovation:
Blading w/o Ditches: $559.44/mi x 0.15 mi = $83.92
Compaction: $415.02/mi x 0.15 mi = $62.25
Extra Time - Reconstruction
Excavator - Large (3 CY) 5 hr x $166.61/hr = $833.05
Tractor: D7 with rippers 5 hr x $250.25/hr = $1,251.25

Subtotal: $2,230.47

Section 1800 Soil Stabilization:
Dry Method with Mulch: $821.09/acre x 0.20 acres = $164.22
Includes Small Quantity Factor of 1.55
+ Seed Cost: $132.00/acre x 0.20 acres = $26.40
+ Mulch Cost: $320.00/acre x 0.20 acres = $64.00

Subtotal: $254.62

Mobilization:
Construction - 1.75% of total Costs = $772.58

Subtotal: $772.58

Total: $5,371.03

ROAD CONSTRUCTION SUMMARY

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023
Road Number: TR 22-01 Road Name:
Temporary Road: 0.09 mi 14 ft Subgrade 0 ft ditch

200 Clearing and Grubbing: 0.41 acres	$1,925.51
300 Excavation: Standard cy	$1,925.73
400 Drainage:	$0.00
Culvert: 0.00 lf	
DownSpout: 0.00 lf	
PolyPipe: 0.00 lf	
500 Renovation:	$0.00
700-1200 Surfacing:	$0.00
1300 Geotextiles:	$0.00
1400 Slope Protection:	$0.00
1800 Soil Stabilization: 0.15 acres	$190.96
Includes Small Quantity Factor of 1.55	
1900 Cattleguards:	$0.00
2100 RoadSide Brushing (NONE):0.00 acres	$0.00
2300 Engineering: 0.00 sta.	$0.00
2400 Minor Concrete:	$0.00
2500 Gabions:	$0.00
8000 Miscellaneous:	$0.00
Mobilization: Const. $679.13 Surf. $0.00	$679.13
Quarry Development:	$0.00
Total:	$4,721.33

Notes:
Quantities shown are estimates only and not pay items.
Surfacing Quantities shown are loose cubic yards.

Road Construction Worksheet

Road Number: TR 22-01 Road Name:

Section 200 Clearing and Grubbing:
Clearing - Heavy (Clearing): Adjustment Factor (2.54)
16-30% (Avg Side Slopes): Adjustment Factor (0.1)
Pile and Burn (Slash): Adjustment Factor (1.28)
greater than 40' (Avg Clearing Widths): Adjustment Factor (0)
Total Adjustment Factor:2.54 + 0.1 + 1.28 + 0 = 3.92
Base Cost/Acre: $1,198.05 x Adjustment Factor: 3.92 x Total Acres: 0.41 = $1,925.51
Subtotal: $1,925.51

Section 300 Excavation:
Excavation - Common: $2.66/cy x 200.00 cy = $532.00
Excavation - Rippable: $5.31/cy x 100.00 cy = $531.00
Embankment Placement & Compaction 306.f - Common: $0.39/cy x 200.00 cy = $78.00
Embankment Placement & Compaction 306.f - Rock: $0.39/cy x 100.00 cy = $39.00
Subgrade Compaction: 4 Sta/hr $34.59/sta. x 4.5 sta = $155.66
Slope Rounding: $0.40/lf x 450.00 lf = $180.00
Embankment Placement & Compaction 306.a - Common: $1.16/cy x 200.00 cy = $232.00
Embankment Placement & Compaction 306.a - Rock: $1.09/cy x 100.00 cy = $109.00
Blading without ditch: $15.35/station x 4.50 stations = $69.08
Subtotal: $1,925.73

Section 1800 Soil Stabilization:
Dry Method with Mulch: $821.09/acre x 0.15 acres = $123.16
Includes Small Quantity Factor of 1.55
+ Seed Cost: $132.00/acre x 0.15 acres = $19.80
+ Mulch Cost: $320.00/acre x 0.15 acres = $48.00
Subtotal: $190.96

Mobilization:
Construction - 1.54% of total Costs = $679.13
Subtotal: $679.13

Total: $4,721.33

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Mobilization Costs - Construction and Surfacing

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023

Average Mobilization distance = 50 miles Factor = 1.00

Mobilization: Construction
Fire Equipment: 8 ea x (1.00 x $91.00/ea + 15 mi x $5.06/mi)= $1,335.20
Graders-all: 8 ea x (1.00 x $536.00/ea + 15 mi x $18.44/mi)= $6,500.80
Brush Cutter: 8 ea x (1.00 x $536.00/ea) = $4,288.00
Rollers & Comp: 8 ea x (1.00 x $536.00/ea + 15 mi x $27.67/mi)= $7,608.40
Excavators (Lg): 4 ea x (1.00 x $1176.00/ea + 15 mi x $33.32/mi)= $6,703.20
RTBackhoes 24/30: 8 ea x (1.00 x $399.00/ea + 15 mi x $7.16/mi)= $4,051.20
Tractors <= D7: 4 ea x (1.00 x $856.00/ea + 15 mi x $48.94/mi)= $6,360.40
Dump Truck<=15cy: 8 ea x (1.00 x $124.00/ea + 15 mi x $5.15/mi)= $1,610.00
Water Truck: 8 ea x (1.00 x $131.00/ea + 15 mi x $5.47/mi)= $1,704.40
Equipment Washing: 16 ea x ($250.00) /ea = $4,000.00

Subtotal: $44,161.60

Mobilization: Surfacing
Comment: Surfacing

Subtotal: $0.00

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Summary of Construction Quantities

T.S. Contract Name: Rum Creek Hazard TS Sale Date: 07-27-2023

Road Number	Const	Improv	Renov	Decomm	Temp
34-7-02.00 A-B			114.05		
34-7-03.00 A1A2			109.30		
34-7-03.01 A-F			412.90		
34-7-05.01			99.79		
34-7-05.02			50.16		
34-7-07.02 A			5.81		
34-7-15.04			5.28		
34-7-21.06 A-C			151.01		
34-7-22.00 A-B			15.31		
34-7-29.02			109.82		
34-7-36.00 K-O			252.38		
34-8-15.00 A			58.61		
34-8-21.00 A-B			14.78		
34-8-21.03			6.86		
34-8-22.01 B-C			57.55		
34-8-22.02			32.74		
34-8-22.03			29.57		
34-8-27.01			34.85		
34-8-28.00 B			66.00		
34-8-34.00 A-B			277.73		
35-7-11.00 C3-F			146.26		
35-7-11.00 G-I			308.35		
35-8-02.00 D-E			109.30		
TR 07-04					7.70
TR 15-02-A					6.40
TR 15-02-B					8.15
TR 22-01					4.50
Total Sta:			2,468.41		26.75

200 Clearing and Grubbing	Clearing acres
34-7-02.00 A-B	0.00
34-7-03.00 A1A2	0.00
34-7-03.01 A-F	0.00
34-7-05.01	0.00
34-7-05.02	0.00
34-7-07.02 A	0.00
34-7-15.04	0.00
34-7-21.06 A-C	0.00
34-7-22.00 A-B	0.00
34-7-29.02	0.00
34-7-36.00 K-O	0.00
34-8-15.00 A	0.00
34-8-21.00 A-B	0.00
34-8-21.03	0.00
34-8-22.01 B-C	0.00
34-8-22.02	0.00
34-8-22.03	0.00
34-8-27.01	0.00
34-8-28.00 B	0.00
34-8-34.00 A-B	0.00
35-7-11.00 C3-F	0.00
35-7-11.00 G-I	0.00

Continuation of Construction Quantities

35-8-02.00 D-E	0.00
TR 07-04	0.71
TR 15-02-A	0.44
TR 15-02-B	0.56
TR 22-01	0.41
Totals:	2.12

300 Excavation	Excav LCY.s	Haul sta-yds	Haul yd-mi
34-7-29.02	1,000	0	1,000
TR 07-04	350	0	0
TR 22-01	300	0	0
Totals:	1,650	0	1,000

Road Widening Where Needed 34-7-29.02
- Excavator - Large (3 CY) . . . . . 24 hr
- Dump Truck 10 cy . . . . . 24 hr
- Large Excavator w/Hammer Attachment . . . . . 8 hr

400 Drainage

Road Number	CMP Culvert	Polypipes	Downspouts

Total Drainage:

Culvert Qty	Totals: Aluminized	Galvanized	No Quantities Poly Pipe
12 inch	0 lf	0 lf	
18 inch	0 lf	0 lf	0 lf
24 inch	0 lf	0 lf	0 lf
30 inch	0 lf	0 lf	0 lf
36 inch	0 lf	0 lf	0 lf
42 inch	0 lf	0 lf	
48 inch	0 lf	0 lf	

Downspout Qty	Half Round	Full (poly)	Full (galv)
18 inch	0 lf	0 lf	0 lf
21 inch	0 lf		
24 inch	0 lf	0 lf	0 lf
30 inch			0 lf

500 Renovation	Blade Miles	Slide cy
34-7-02.00 A-B	2.16	0
34-7-03.00 A1A2	2.07	0
34-7-03.01 A-F	7.82	100
34-7-05.01	1.89	40
34-7-05.02	0.95	0
34-7-07.02 A	0.11	0
34-7-15.04	0.10	0
34-7-21.06 A-C	2.86	0
34-7-22.00 A-B	0.29	0
34-7-29.02	2.08	20
34-7-36.00 K-O	4.78	0
34-8-15.00 A	1.11	0
34-8-21.00 A-B	0.28	0

Continuation of Construction Quantities

34-8-21.03	0.13	0
34-8-22.01 B-C	1.09	0
34-8-22.02	0.62	0
34-8-22.03	0.56	0
34-8-27.01	0.66	0
34-8-28.00 B	1.25	0
35-7-11.00 C3-F	2.77	0
35-7-11.00 G-I	5.84	120
35-8-02.00 D-E	2.07	0
Totals:	41.49	280

Cleaning Ditches/Haul on BST 34-8-34.00 A-B
- Motor Grader 14M . . . . . 32 hr
- Dump Truck 10 cy . . . . . 24 hr
- Backhoe . . . . . 24 hr

Extra time - Reconstruction TR 15-02-A
- Excavator - Large (3 CY) . . . . . 4 hr
- Tractor: D7 with rippers . . . . . 4 hr

Extra Time - Reconstruction TR 15-02-B
- Excavator - Large (3 CY) . . . . . 5 hr
- Tractor: D7 with rippers . . . . . 5 hr

Fire rehab debris removal 34-8-22.03
- Excavator - Large (3 CY) . . . . . 4 hr

Repairing Stump Holes 34-7-29.02
- Excavator - Large (3 CY) . . . . . 8 hr

Repairing Stump Holes 34-8-22.03
- Excavator - Large (3 CY) . . . . . 4 hr

Water bar replacement 35-8-02.00 D-E
- Construct water bar . . . . . 26 EA

Watering 34-7-05.01
- Water Truck 3000 Gal . . . . . 8 hr

Watering 34-7-05.02
- Water Truck 3000 Gal . . . . . 4 hr

Watering 34-7-21.06 A-C
- Water Truck 3000 Gal . . . . . 12 hr

Watering 34-7-07.02 A
- Water Truck 3000 Gal . . . . . 1 hr

Watering 34-7-03.01 A-F
- Water Truck 3000 Gal . . . . . 32 hr

Watering 34-8-15.00 A
- Water Truck 3000 Gal . . . . . 5 hr

Watering 35-7-11.00 C3-F
- Water Truck 3000 Gal . . . . . 12 hr

Watering 35-7-11.00 G-I
- Water Truck 3000 Gal . . . . . 24 hr

Watering 34-7-22.00 A-B
- Water Truck 3000 Gal . . . . . 2 hr

Watering 34-8-34.00 A-B
- Water Truck 3000 Gal . . . . . 5 hr

Watering 34-7-02.00 A-B
- Water Truck 3000 Gal . . . . . 10 hr

Watering 34-7-15.04
- Water Truck 3000 Gal . . . . . 1 hr

Watering 34-8-21.03
- Water Truck 3000 Gal . . . . . 1 hr

Watering 34-7-36.00 K-O
- Water Truck 3000 Gal . . . . . 20 hr

Watering 34-8-22.02
- Water Truck 3000 Gal . . . . . 3 hr

Watering 35-8-02.00 D-E
- Water Truck 3000 Gal . . . . . 8 hr

Continuation of Construction Quantities

Watering 34-8-22.03
Water Truck 3000 Gal . . . . . 2 hr
Watering 34-8-27.01
Water Truck 3000 Gal . . . . . 3 hr
Watering 34-8-28.00 B
Water Truck 3000 Gal . . . . . 5 hr
Watering 34-8-22.01 B-C
Water Truck 3000 Gal . . . . . 5 hr
Watering 34-8-21.00 A-B
Water Truck 3000 Gal . . . . . 2 hr
Watering 34-7-29.02
Water Truck 3000 Gal . . . . . 12 hr
Watering for Compaction 34-7-03.00 A1A2
Water Truck 3000 Gal . . . . . 8 hr

Surfacing (Loose Cubic Yards)
Note: Due to slight rounding differences between total LCY vs. subtotaled LCY, Totals shown here may not be exactly as shown in the road summaries and worksheets.

Hog Cr BLM Stockpile

	Roadway	Turnouts	Other	
34-7-29.02	0	0	20	20
34-7-03.00 A1A2	0	0	20	20
34-7-03.01 A-F	0	0	20	20
Totals:	0	0	60	60

Peavine BLM Stockpile

Commercial	Roadway	Turnouts	Other	
34-8-22.03	0	0	20	20
35-8-02.00 D-E	0	0	20	20
Totals:	0	0	40	40

1400 Slope Protection – Robco Class III Riprap
34-7-03.01 A-F Gradation Class 2: 100 cy
Totals: 100 cy

Fill Shoulder Repair MP 0.91 34-7-03.01 A-F
Excavator - Large (3 CY) . . . . . 24 hr
Dump Truck 10 cy . . . . . 24 hr
Vibratory roller, Steel Drum . . . . . 16 hr
Water Truck 3000 Gal . . . . . 16 hr

1800 Soil stabilization - acres

	Dry W/O Mulch	Dry/with Mulch	Hydro Mulch
TR 07-04	0.0	0.0	0.0
TR 15-02-A	0.0	0.0	0.0
TR 15-02-B	0.0	0.0	0.0
TR 22-01	0.0	0.0	0.0
Totals:	0.00	0.80	0.00

Small Quantity Factor of 1.55 used

Continuation of Construction Quantities

2100 RoadSide Brushing	miles
34-7-02.00 A-B - Manual Brushing	2.16
34-7-03.00 A1A2 - Manual Brushing	2.07
34-7-03.01 A-F - Manual Brushing	7.82
34-7-05.01 - Manual Brushing	1.89
34-7-05.02 - Manual Brushing	0.95
34-7-07.02 A - Manual Brushing	0.11
34-7-15.04 - Manual Brushing	0.10
34-7-21.06 A-C - Manual Brushing	2.86
34-7-22.00 A-B - Manual Brushing	0.29
34-7-29.02 - Manual Brushing	2.08
34-7-36.00 K-O - Manual Brushing	4.78
34-8-15.00 A - Manual Brushing	1.11
34-8-21.00 A-B - Manual Brushing	0.28
34-8-21.03 - Manual Brushing	0.13
34-8-22.01 B-C - Manual Brushing	1.09
34-8-22.02 - Manual Brushing	0.62
34-8-22.03 - Manual Brushing	0.56
34-8-27.01 - Manual Brushing	0.66
34-8-28.00 B - Manual Brushing	1.25
34-8-34.00 A-B - Manual Brushing	5.26
35-7-11.00 C3-F - Manual Brushing	2.77
35-7-11.00 G-I - Manual Brushing	5.84
35-8-02.00 D-E - Manual Brushing	2.07
Totals:	46.75

Chiping Brush 34-7-05.02
- Brush Chipper - Medium Section . . . . . 3 hr
- Brush Chipper - Heavy Section . . . . . 5 hr

Chipping Brush 34-7-29.02
- Brush Chipper - Medium . . . . . 4 hr
- Brush Chipper - Heavy . . . . . 8 hr

Chipping Brush 34-7-03.01 A-F
- Brush Chipper - Medium Sections . . . . . 30 hr
- Brush Chipper - Heavy Sections . . . . . 20 hr

Chipping Brush 34-7-07.02 A
- Brush Chipper . . . . . 1 hr

Chipping Brush 34-7-05.01
- Brush Chipper . . . . . 10 hr

Chipping Brush 34-8-34.00 A-B
- Brush Chipper . . . . . 30 hr

Chipping Brush 34-8-15.00 A
- Brush Chipper . . . . . 6 hr

Chipping Brush 35-7-11.00 C3-F
- Brush Chipper . . . . . 16 hr

Chipping Brush 35-7-11.00 G-I
- Brush Chipper . . . . . 30 hr

Chipping Brush 34-7-22.00 A-B
- Brush Chipper . . . . . 2 hr

Chipping Brush 34-7-03.00 A1A2
- Brush Chipper . . . . . 10 hr

Chipping Brush 34-7-02.00 A-B
- Brush Chipper . . . . . 12 hr

Chipping Brush 34-8-21.03
- Brush Chipper . . . . . 2 hr

Chipping Brush 34-7-15.04
- Brush Chipper . . . . . 1 hr

Chipping Brush 34-7-36.00 K-O
- Brush Chipper . . . . . 16 hr

Continuation of Construction Quantities

Chipping Brush 34-8-22.02
Brush Chipper . . . . . 4 hr
Chipping Brush 35-8-02.00 D-E
Brush Chipper - Medium . . . . . 6 hr
Brush Chipper - Heavy . . . . . 10 hr
Chipping Brush 34-8-22.03
Brush Chipper . . . . . 3 hr
Chipping Brush 34-8-27.01
Brush Chipper . . . . . 7 hr
Chipping Brush 34-8-28.00 B
Brush Chipper . . . . . 7 hr
Chipping Brush 34-8-22.01 B-C
Brush Chipper . . . . . 6 hr
Chipping Brush 34-8-21.00 A-B
Brush Chipper . . . . . 3 hr
Chipping Brush 34-7-21.06 A-C
Brush Chipper - Medium . . . . . 13 hr
Brush Chipper - Heavy . . . . . 10 hr

8000 Miscellaneous
HPOC Installation 34-7-02.00 A-B
HPOC Installation . . . . . 3 EA
HPOC Installation 34-7-21.06 A-C
HPOC Installation . . . . . 4 EA
HPOC Installation 35-7-11.00 G-I
HPOC Installation . . . . . 3 EA
HPOC Sites 34-7-36.00 K-O
HPOC Installation . . . . . 1 EA
HPOC Sites 35-7-11.00 C3-F
HPOC Installation . . . . . 1 EA
HPOC Sites 35-8-02.00 D-E
HPOC Installation . . . . . 1 EA
HPOC Sites 34-7-03.01 A-F
HPOC Installation . . . . . 3 EA
HPOC Sites 34-7-03.00 A1A2
HPOC Installation . . . . . 4 EA

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

EXHIBIT C1

RUM CREEK HAZARD T.S.
TRACT NO. ORM070.TS.2023.0011

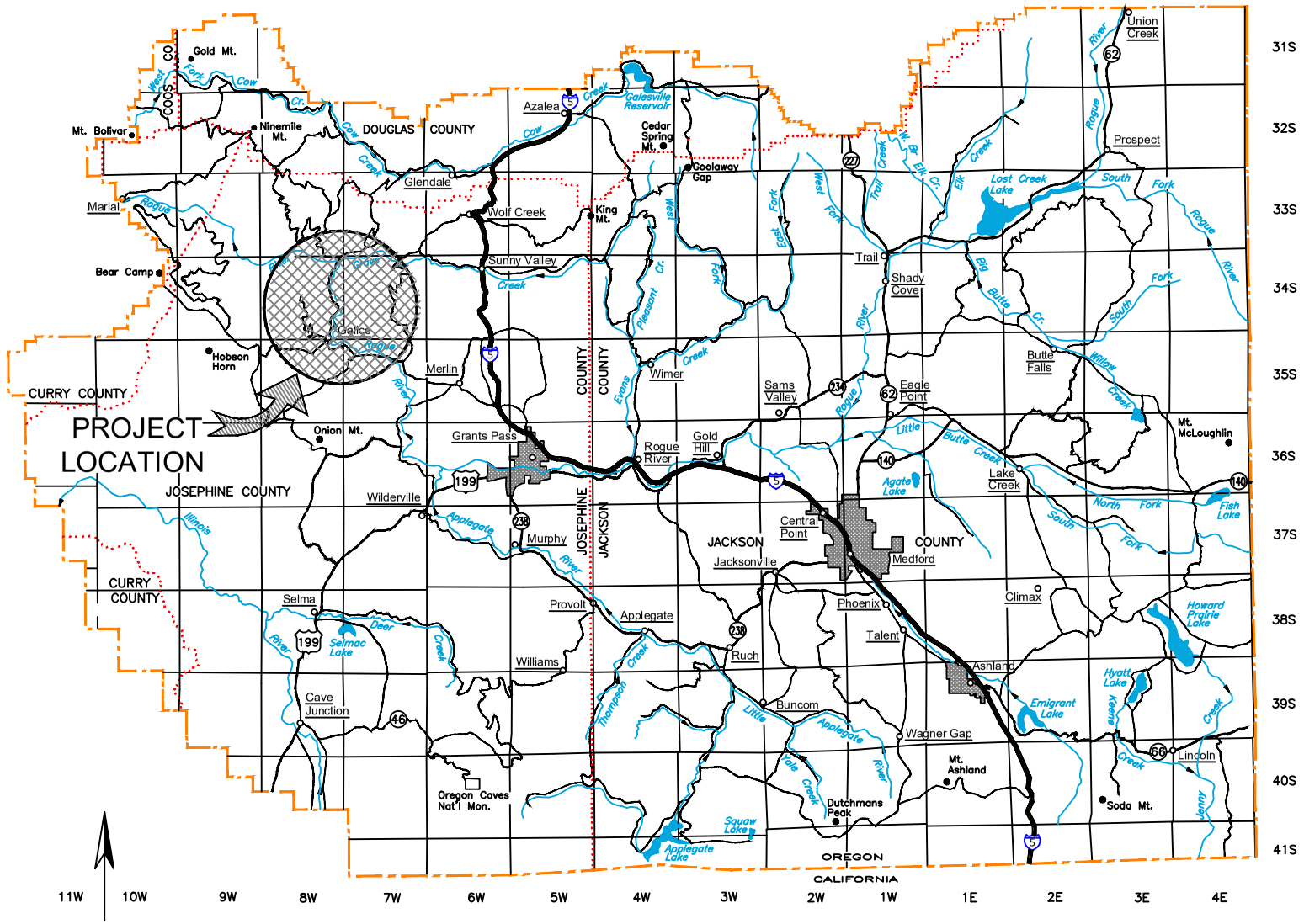


EXHIBIT NO.	DESCRIPTION
C1	TITLE SHEET
C2	TIMBER SALE RENOVATION MAPS
C3	ESTIMATE OF QUANTITIES - CONSTRUCTION
C4	SPECIFICATION SHEET
C5	TYPICAL ROAD RENOVATION DETAILS
C6	ROADSIDE BRUSHING DETAIL
C7	DRAINAGE & EROSION CONTROL DETAILS
C8	ROAD RENOVATION WORKLIST
C9	SPECIAL PROVISIONS
C10	ROAD SPECIFICATIONS

ALWAYS THINK SAFETY

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

RUM CREEK HAZARD TIMBER SALE COVER SHEET

DRAFTED BY: BLM	SCALE: 1" = 12 MI
DATE: MARCH 2023	SHEET: 1 OF 1

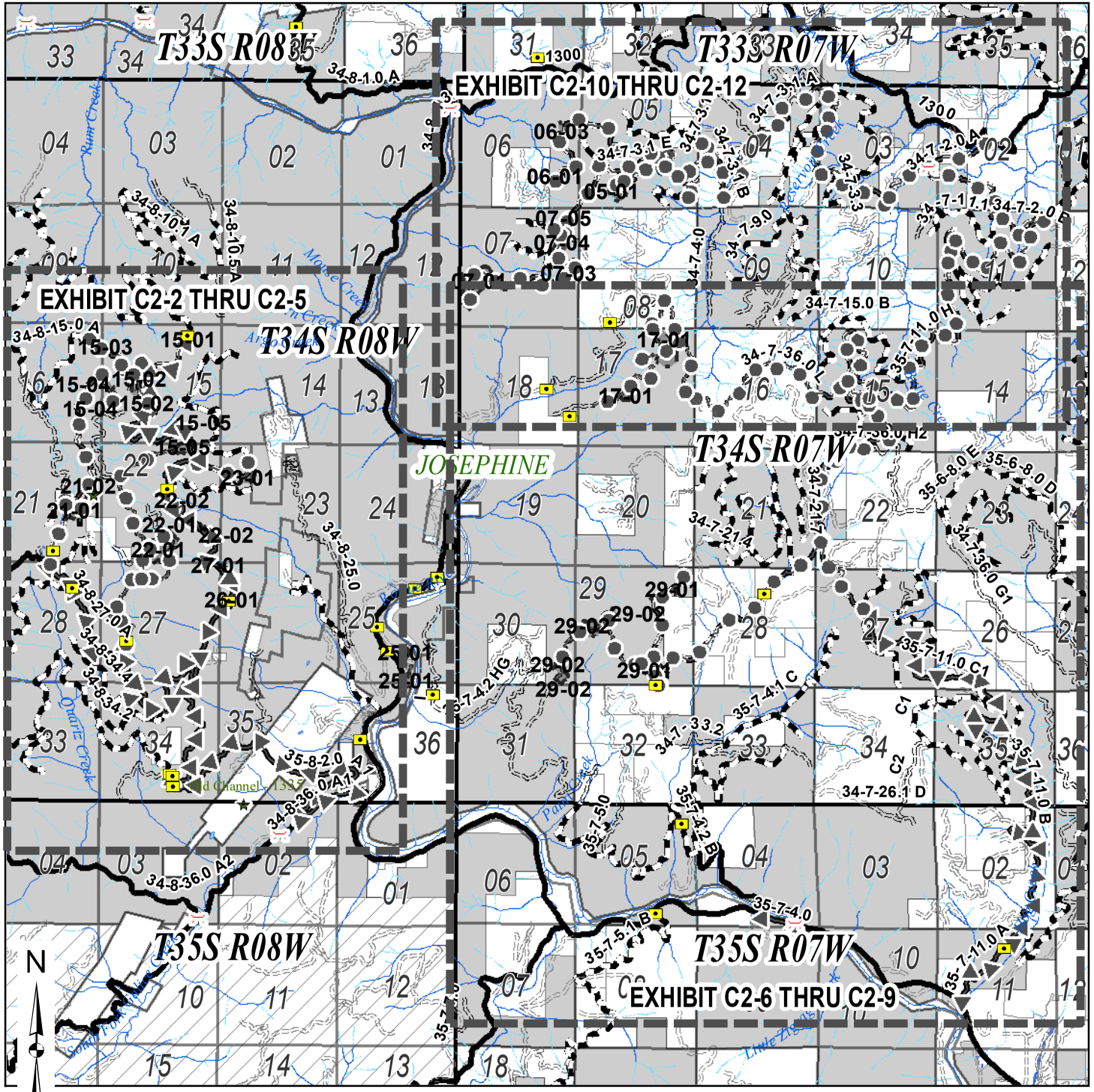


EXHIBIT C2-1

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE OVERALL SALE AREA

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 1 OF 13

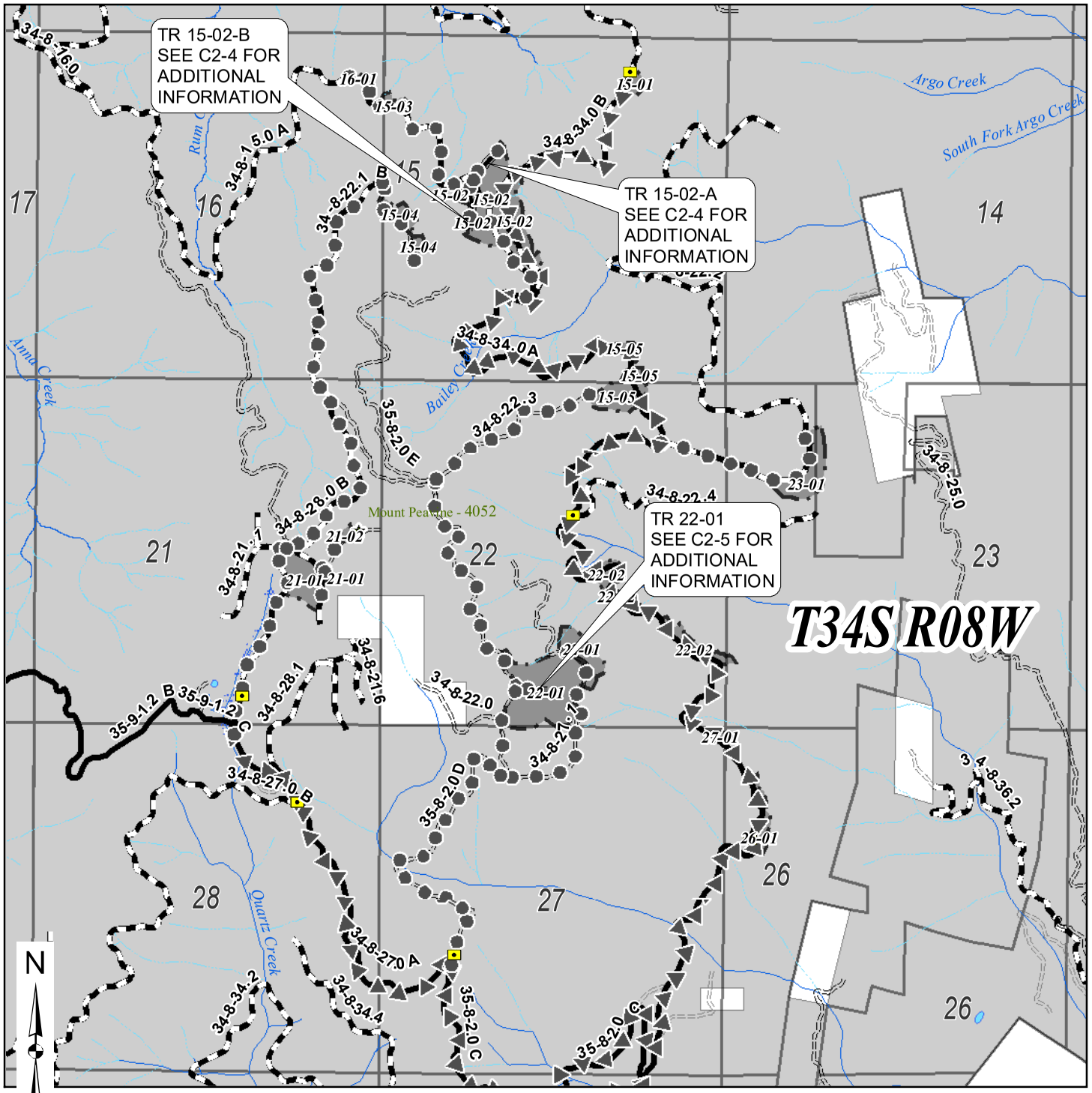


EXHIBIT C2-2

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE
ROAD RENOVATION MAP
PEAVINE/RUM CREEK AREA

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 2 OF 13

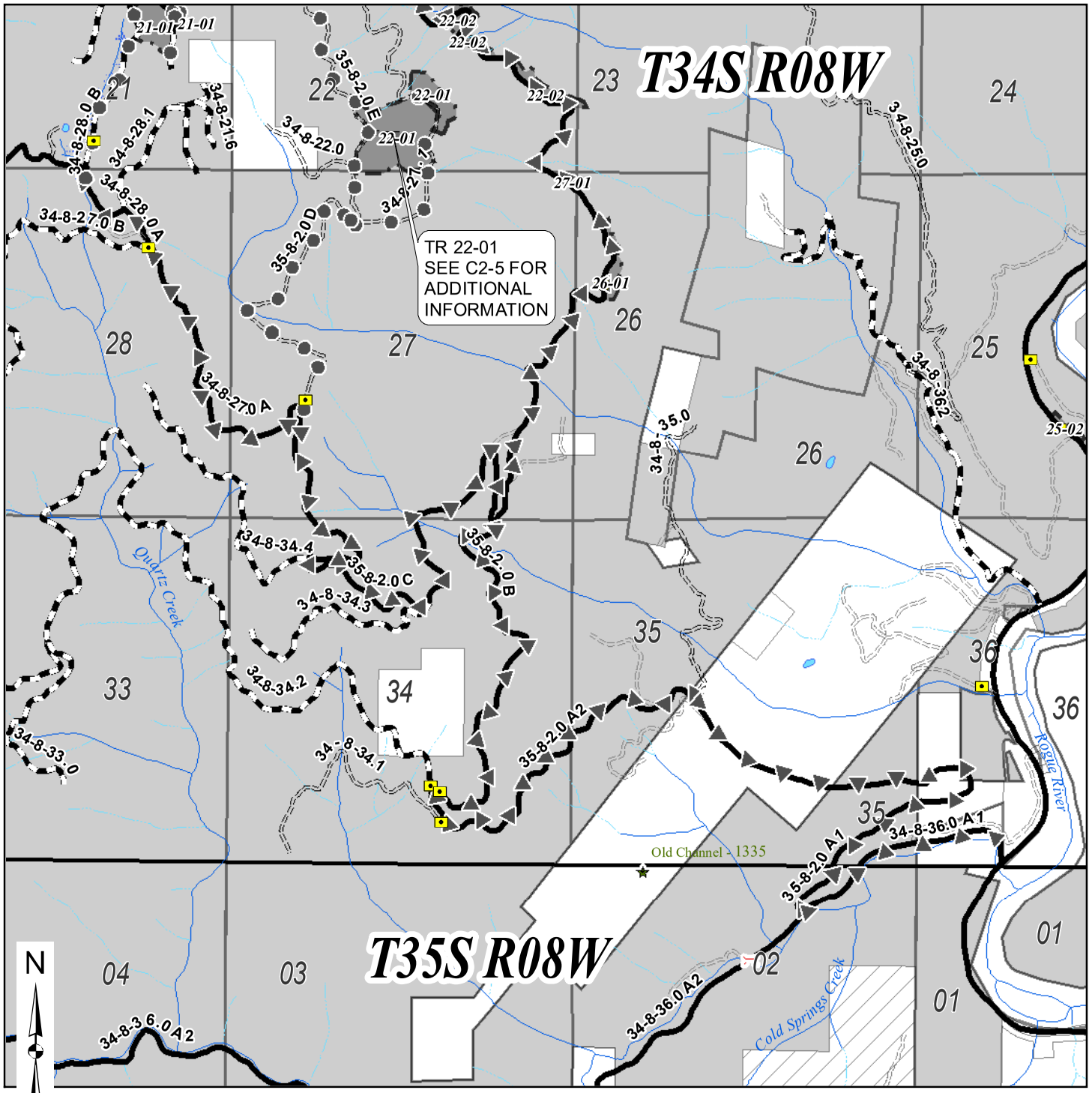


EXHIBIT C2-3

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE
ROAD RENOVATION MAP
PEAVINE/RUM CREEK AREA

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 3 OF 13

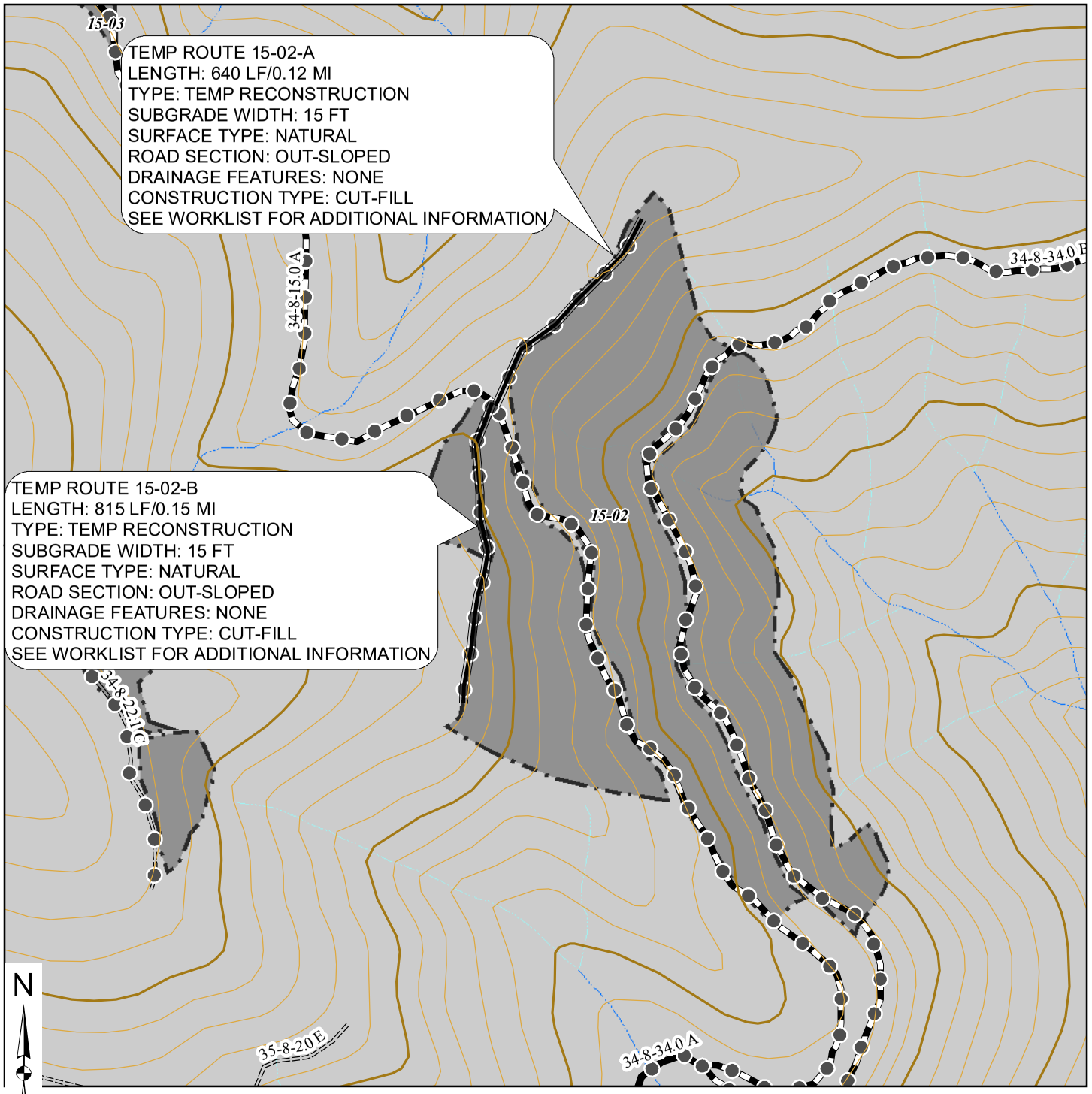


EXHIBIT C2-4

LEGEND

Land Ownership

- BLM
- Non-BLM
- Rum Creek Hazard Tree Units

Roads by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

Activity

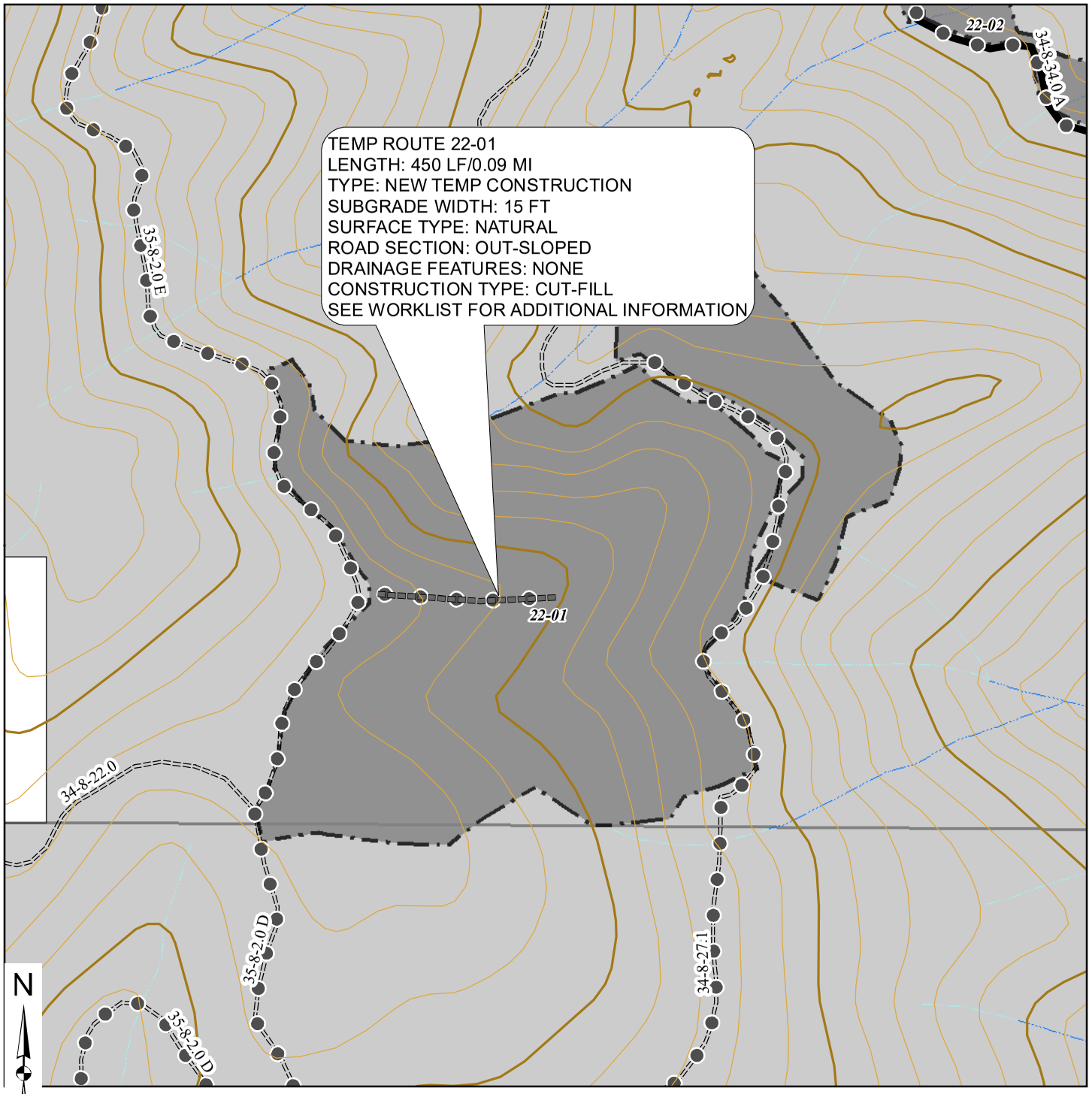
- Temp Construction
- Temp Reconstruction
- Barricade
- Gate

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

RUM CREEK HAZARD TIMBER SALE
TEMP ROUTE 15-02-A and TEMP ROUTE 15-02-B MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 4 OF 13

EXHIBIT C2-5



LEGEND

Land Ownership

- BLM
- Non-BLM
- Rum Creek Roadside Hazard Tree Units

Roads by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

Activity

- Temp Construction
- Temp Reconstruction
- Barricade
- Gate

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

RUM CREEK HAZARD TIMBER SALE
TEMP ROUTE 22-01 MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 5 OF 13

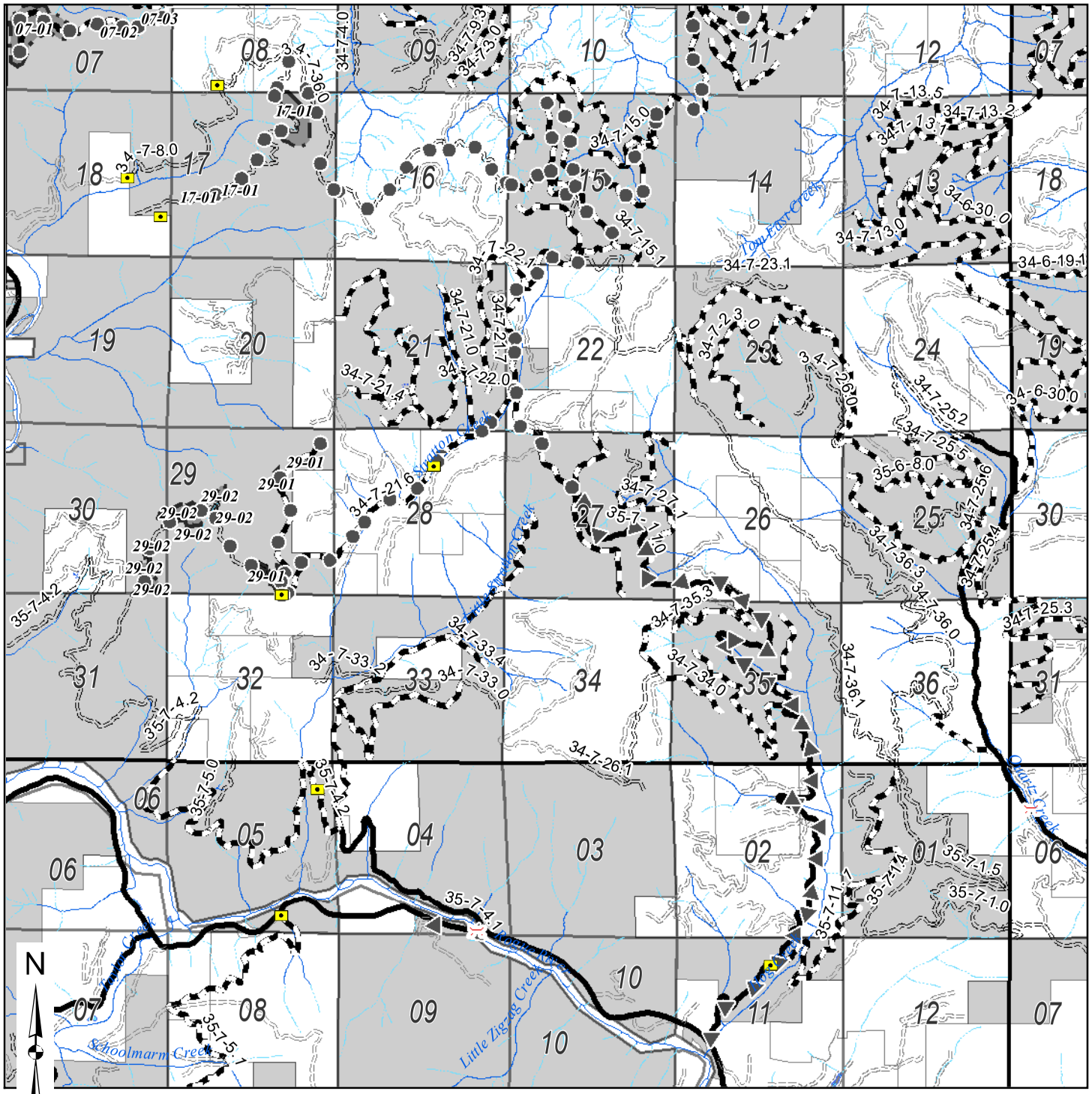


EXHIBIT C2-6

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD RENOVATION HOG CREEK/ANGORA MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 6 OF 13

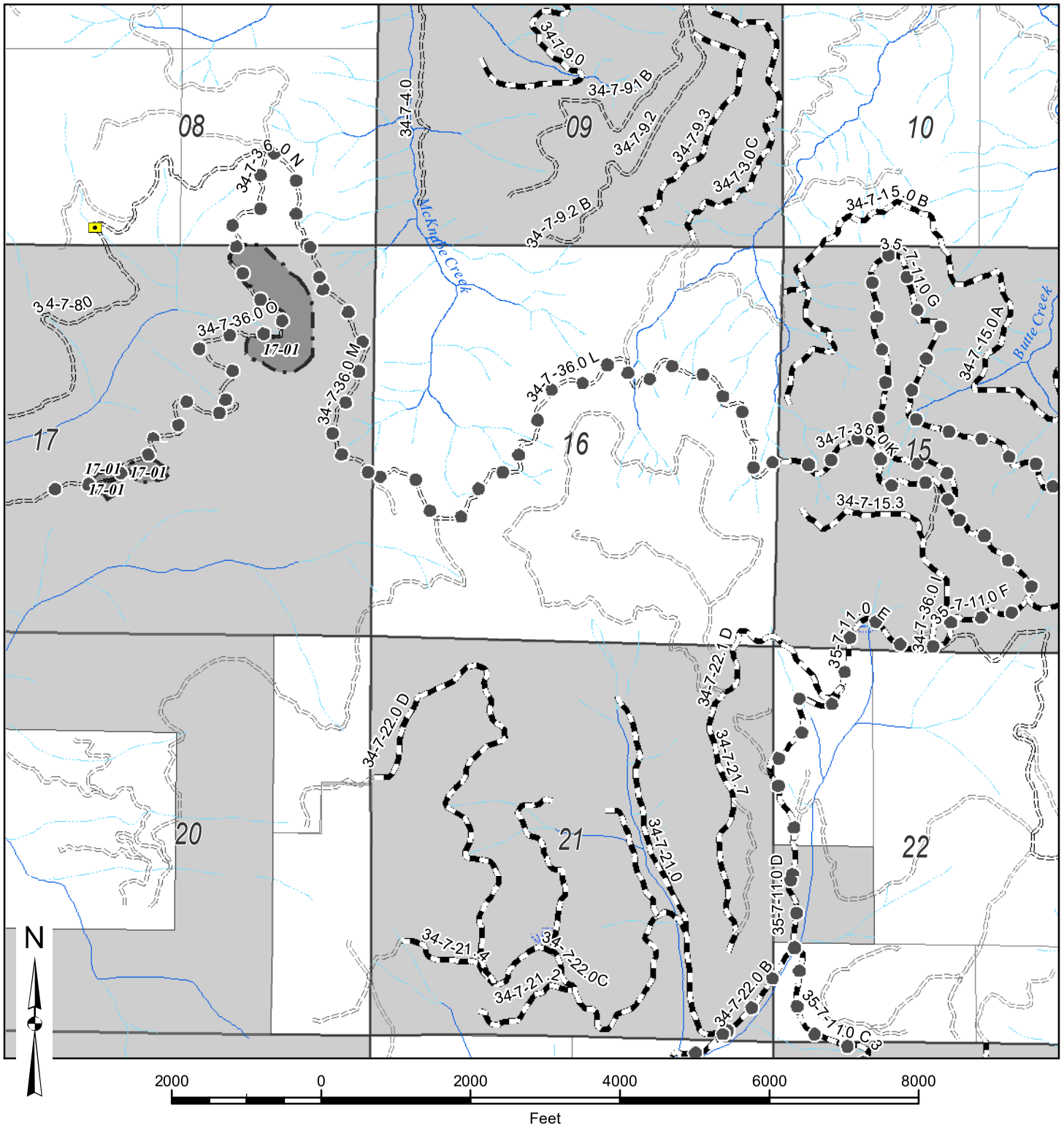


EXHIBIT C2-7

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD RENOVATION HOG CREEK/ANGORA MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 7 OF 13

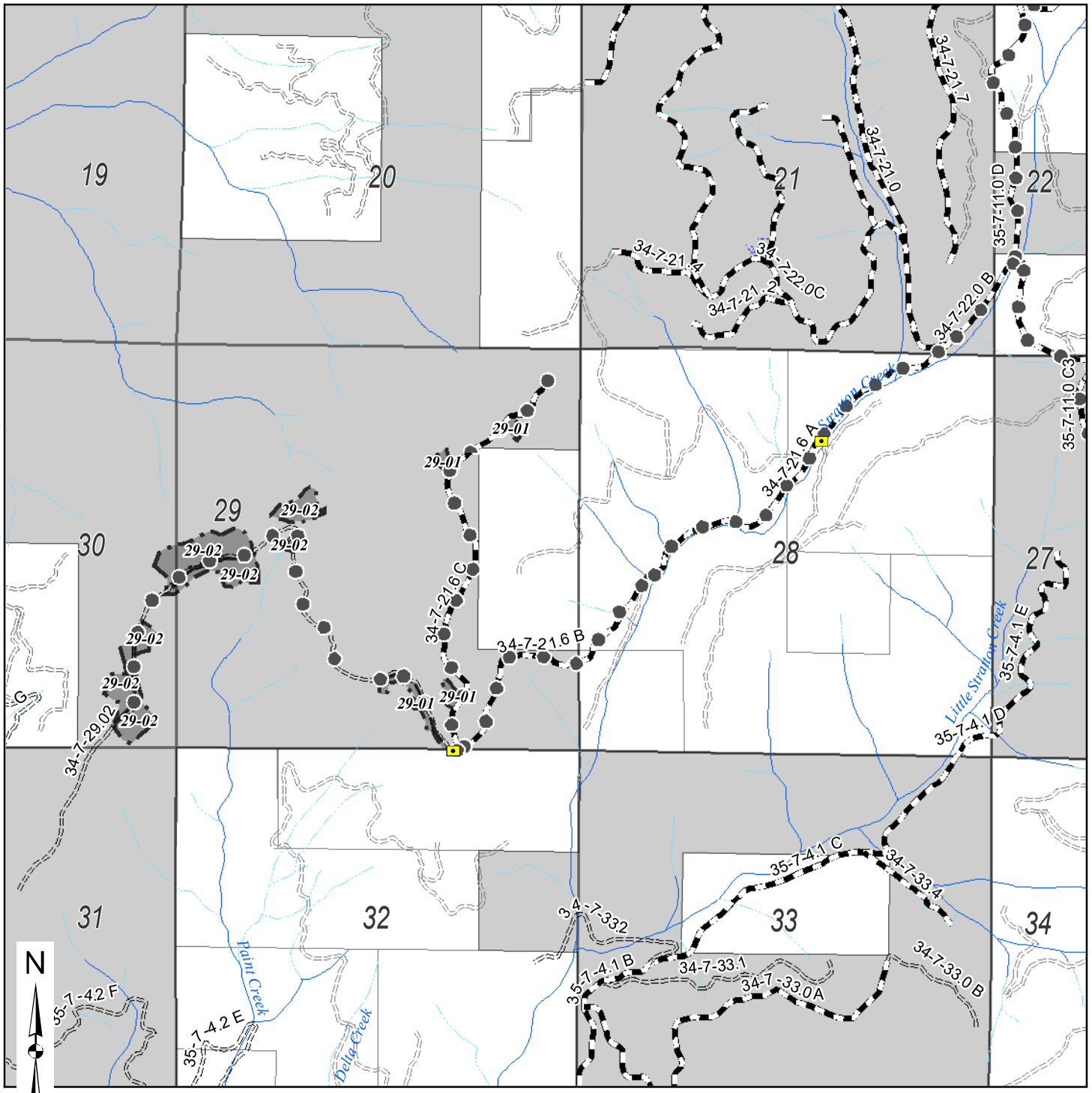


EXHIBIT C2-8

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD RENOVATION HOG CREEK/ANGORA MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 8 OF 13

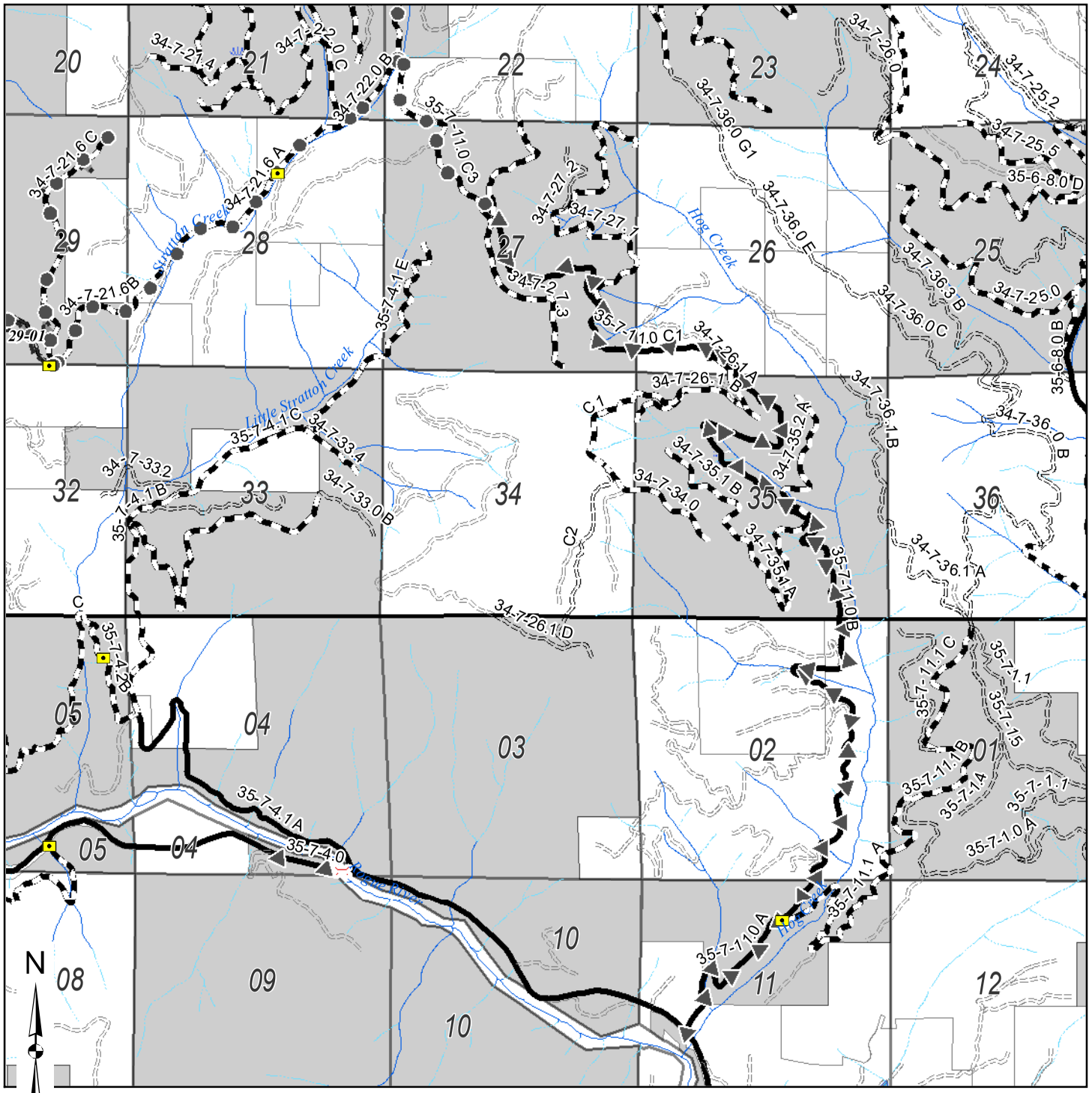


EXHIBIT C2-9

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD RENOVATION HOG CREEK/ANGORA MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 9 OF 13

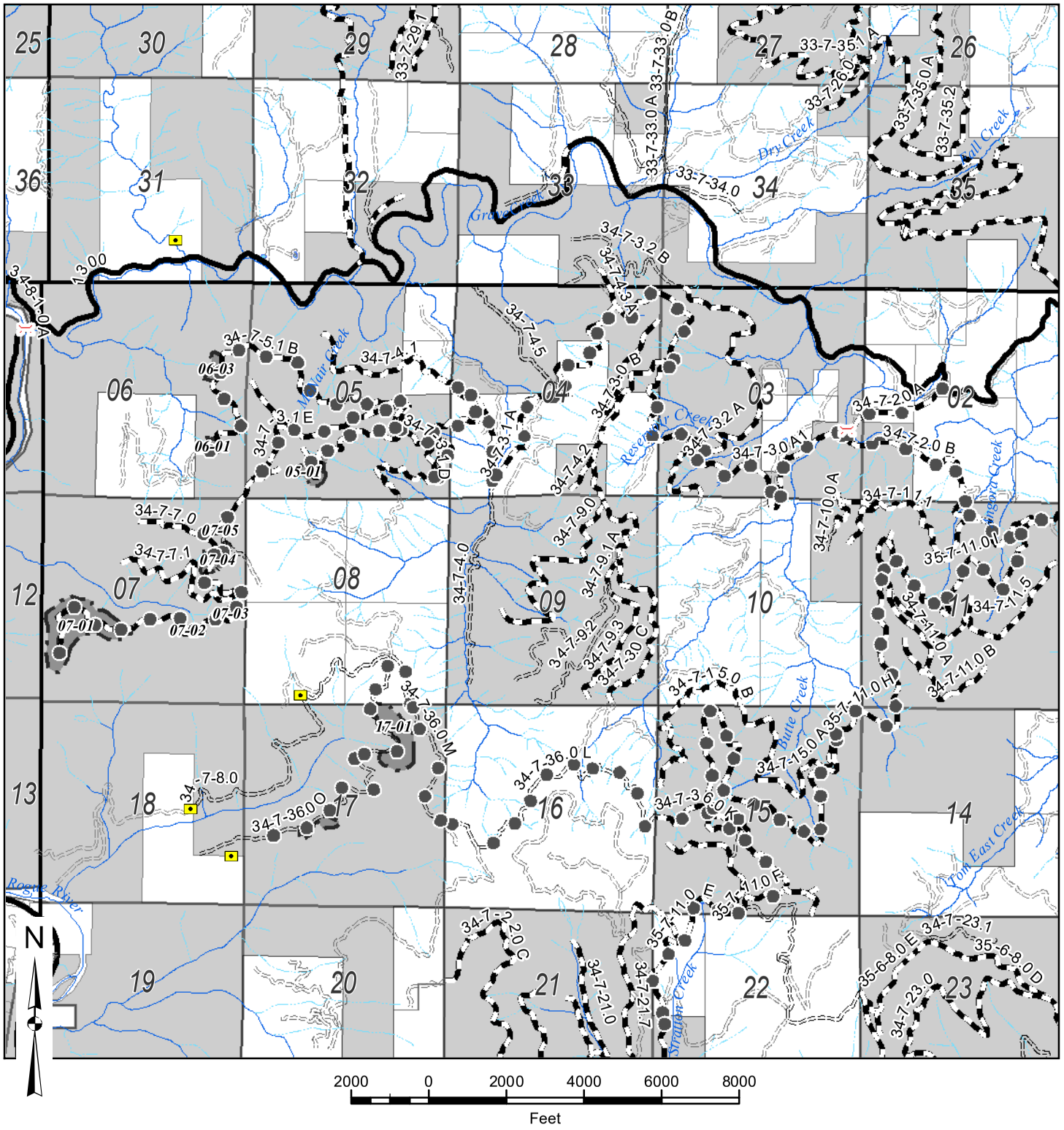


EXHIBIT C2-10

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD RENOVATION ANGORA/MCKNABE MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 10 OF 13

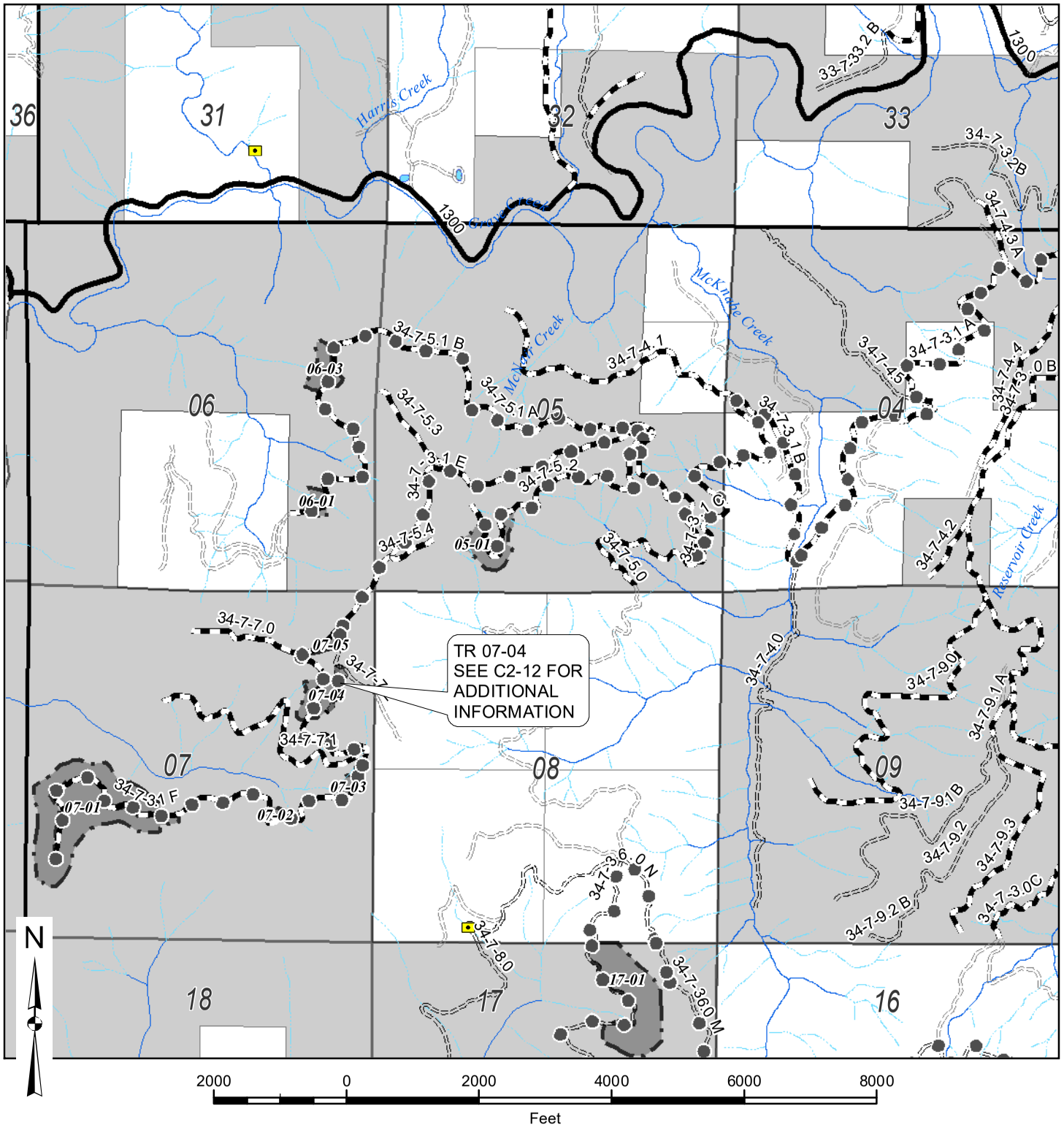


EXHIBIT C2-11

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD RENOVATION ANGORA/MCKNABE MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 11 OF 13

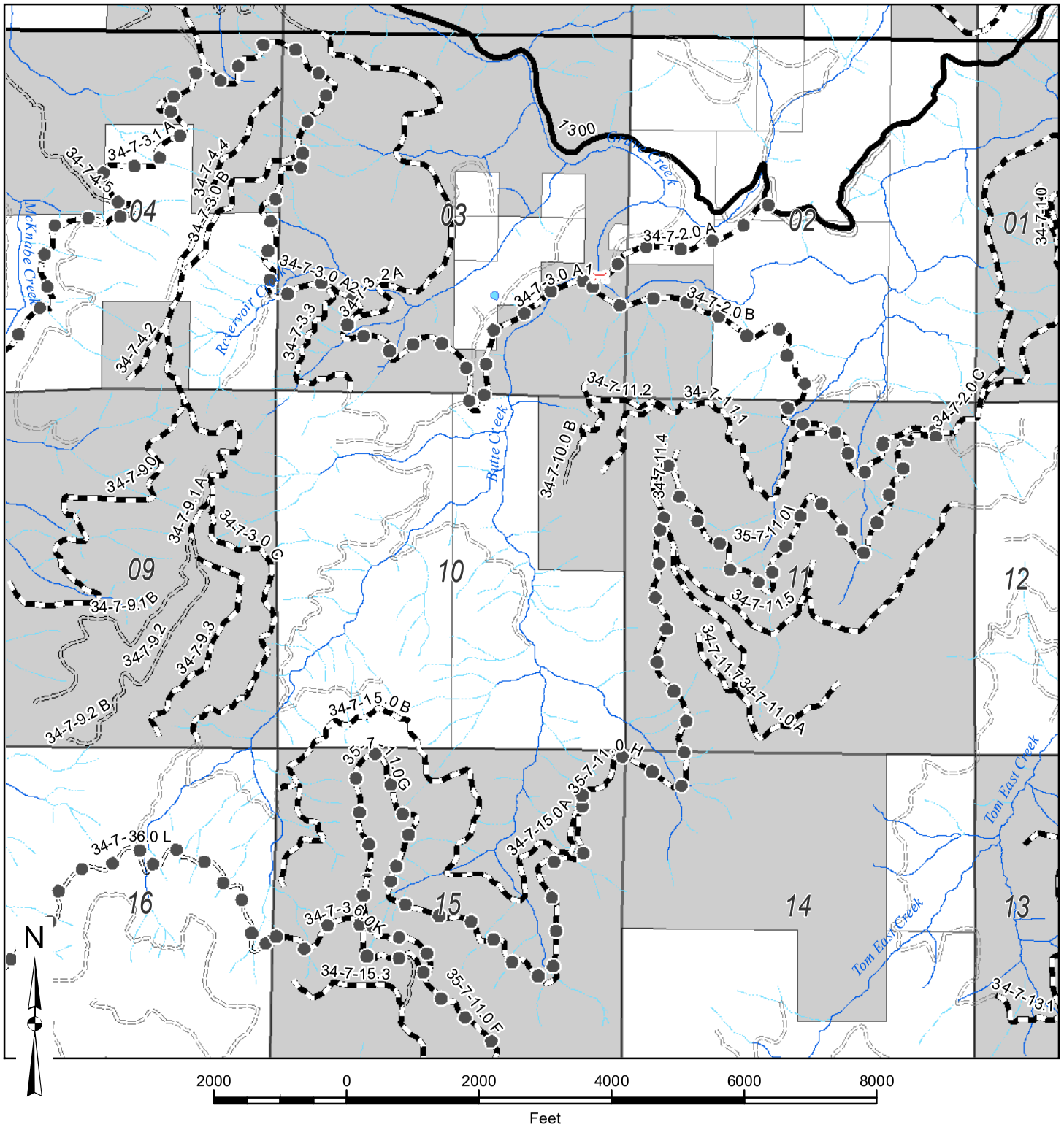


EXHIBIT C2-12

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

- BLM
- Purchaser

Temporary Roads

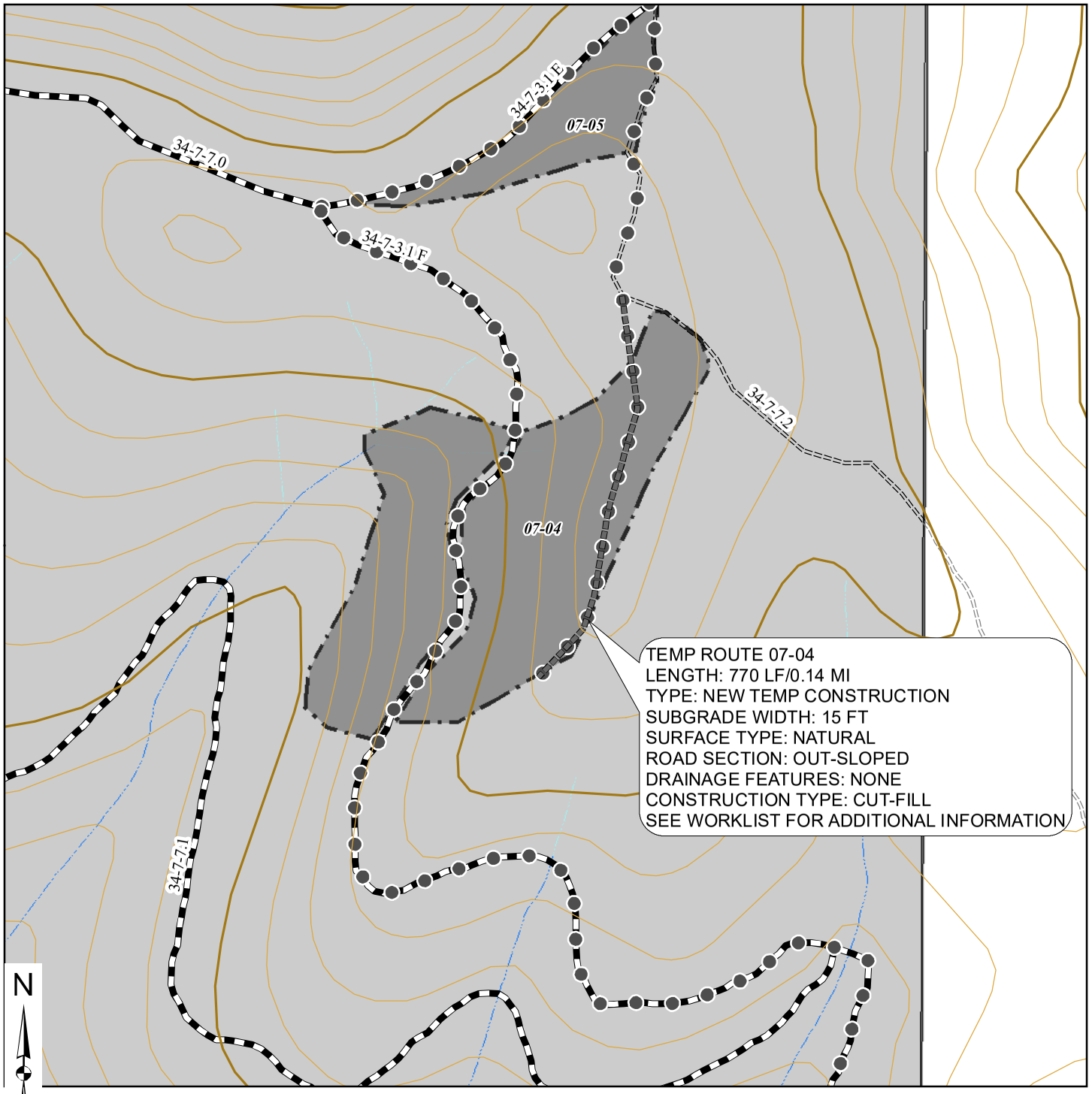
- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD RENOVATION ANGORA/MCKNABE MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 12 OF 13

EXHIBIT C2-13



LEGEND

Land Ownership

- BLM
- Non-BLM
- Rum Creek Hazard Tree Units

Roads by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Renovation Responsibility

Contract_Maint

- BLM
- Purchaser

Temporary Roads

Activity

- Temp Construction
- Temp Reconstruction
- Barricade
- Gate

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

RUM CREEK HAZARD TIMBER SALE
TEMP ROUTE 07-04 MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 13 OF 13

EXHIBIT C3-1

ROAD NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		DRAINAGE						RENOVATION				AGGREGATE			SOIL STABILIZATION	ROADSIDE BRUSHING AND/OR CHIPPING	ENGINEERING (SLOPE STAKING)	MISCELLANEOUS						
					COMMON	ROCK	18" CMP	24" CMP	30" CMP	36" CMP	24" FULL ROUND DOWNSPOUT	30" FULL ROUND DOWNSPOUT	SLIDE REMOVAL	BLADING, WATERING, & ROLLING	DITCH AND/OR CULVERT CLEANING	SCARIFICATION AND/OR HEAVY BLADING	SURF. COURSE CRUSHED ROCK (3/4"-minus)	SURF. COURSE CRUSHED ROCK (1-1/2"-minus)	SLOPE PROTECTION				INSTALL BMPs @ HYDRO POINTS OF CONCERN	RECONSTRUCT WATER BARS	RECONSTRUCT WATER DIPS	CONSTRUCT TURNAROUND	RECONSTRUCT TURNAROUND	REMOVE EXIST. BERM	CONSTRUCT HELI-LANDING
SPECIFICATION NO. →				200	300		400						500				1200	1200	1400	1800	2100	2300	8000						
UNITS →	MP	MP	MILE	ACRE	CY	CY	LF	LF	LF	LF	LF	LF	CY	MILE	MILE	MILE	LCY	LCY	CY	ACRE	MILE	STA	EA	EA	EA	EA	EA	EA	EA
PEAVINE/RUM CREEK AREA																													
34-8-34.0 (A-B)	0.00	5.26	5.26												5.26						5.26								
34-8-15.0 (A)	0.00	1.11	1.11											1.11	1.11	0.25					1.11								
34-8-22.2	0.00	0.62	0.62											0.62							0.62								
35-8-2.0 (D-E)	6.50	8.57	2.07											2.07	1.14	0.50	20				2.07		1	26					
34-8-22.3	0.00	0.56	0.56											0.56			20				0.56								
34-8-27.1	0.00	0.66	0.66											0.66							0.66								
34-8-28.0 (B)	0.33	1.58	1.25											1.25							1.25								
34-8-22.1 (B-C)	0.49	1.58	1.09											1.09	0.79						1.09								
34-8-21.0 (A-B)	0.00	0.28	0.28											0.28		0.10					0.28								
34-8-21.3	0.00	0.13	0.13											0.13							0.13								
HOG CREEK/ANGORA AREA																													
34-7-22.0 (A-B)	0.00	0.29	0.29											0.29	0.29	0.29					0.29								
34-7-21.6 (A-C)	0.00	2.86	2.86											2.86	2.86	0.50					2.86		4						
SEE PAGE 2 FOR ROAD TOTALS																													

RENOVATION NOTES

1. ROADS LISTED FOR SURFACE RESHAPING SHALL CONSIST OF BLADING, WATERING, & ROLLING PER CONTRACT SPECIFICATIONS & DRAWINGS.

2. DITCH/CULVERT CLEANING SHALL CONSIST OF DITCH BLADING AND RESHAPING, CLEARING DEBRIS, VEGETATION, SEDIMENT, ROCK AND ALL OTHER MATERIAL HINDERING THE FLOW OF RUNOFF PER CONTRACT SPECIFICATIONS & DRAWINGS.

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

AGGREGATE GRADATION REQUIREMENTS

ITEM 900

SIZE	GRADATION
4 inch	A
3 inch	B
2 inch	C
1 1/2 inch	D

ITEM 1000

SIZE	GRADATION
3 inch	A,C,F
2 inch	B,D,G,H

ITEM 1200

SIZE	GRADATION
1 1/2 inch	C,C-1
1 inch	D,D-1
3/4 inch	E,E-1

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

RUM CREEK HAZARD TIMBER SALE ESTIMATE OF QUANTITIES*

DRAFTED BY: BLM	SCALE: NONE
DATE: APRIL 2023	SHEET: 1 OF 3

EXHIBIT C3-2

ROAD NUMBER	FROM	TO	LENGTH	CLEARING AND GRUBBING	EXCAVATION		DRAINAGE						RENOVATION				AGGREGATE			SOIL STABILIZATION	ROADSIDE BRUSHING AND/OR CHIPPING	ENGINEERING (SLOPE STAKING)	MISCELLANEOUS						
					COMMON	ROCK	18" CMP	24" CMP	30" CMP	36" CMP	24" FULL ROUND DOWNSPOUT	30" FULL ROUND DOWNSPOUT	SLIDE REMOVAL	BLADING, WATERING, & ROLLING	DITCH AND/OR CULVERT CLEANING	SCARIFICATION AND/OR HEAVY BLADING	SURF. COURSE CRUSHED ROCK (3/4"-minus)	SURF. COURSE CRUSHED ROCK (1-1/2"-minus)	SLOPE PROTECTION				INSTALL BMPs @ HYDRO POINTS OF CONCERN	RECONSTRUCT WATER DIPS	RECONSTRUCT WATER DIPS	CONSTRUCT TURNAROUND	RECONSTRUCT TURNAROUND	REMOVE EXIST. BERM	CONSTRUCT HELI-LANDING
SPECIFICATION NO. →				200	300		400						500				900	1200	1400	1800	2100	2300	8000						
UNITS →	MP	MP	MILE	ACRE	CY	CY	LF	LF	LF	LF	LF	LF	CY	MILE	MILE	MILE	LCY	LCY	CY	ACRE	MILE	STA	EA	EA	EA	EA	EA	EA	EA
HOG CREEK/ANGORA AREA (CONT.)																													
34-7-29.2	0.00	2.08	2.08		500	500							20	2.08		0.40	20				2.08								
35-7-11.0 (C3-F)	6.05	8.82	2.77											2.77	2.77	0.50					2.77		1						
34-7-15.4	0.00	0.10	0.10											0.10	0.10						0.10								
34-7-36.0 (K-O)	7.88	12.66	4.78											4.78	3.50	1.00					4.78		1						
35-7-11.0 (G-I)	8.82	14.66	5.84										120	5.84	5.84	1.00					5.84		3						
34-7-2.0 (B-A)	2.16	0.00	2.16											2.16	2.16	0.50					2.16		3						
ANGORA/McKNABE CREEK AREA																													
34-7-3.0 (A1-A2)	0.00	2.07	2.07											2.07	2.07	0.50	20				2.07		4						
34-7-3.1 (A-F)	0.00	7.82	7.82										100	7.82	4.43	1.50	20		100		7.82		3						
34-7-7.2 (A)	0.00	0.11	0.11											0.11							0.11								
34-7-5.2	0.00	0.95	0.95											0.95							0.95								
34-7-5.1	0.00	1.89	1.89										40	1.89		0.25					1.89								
ROAD TOTALS			46.75		500	500							280	41.49	32.32	7.29	100		100		46.75		20	26					

RENOVATION NOTES

1. ROADS LISTED FOR SURFACE RESHAPING SHALL CONSIST OF BLADING, WATERING, & ROLLING PER CONTRACT SPECIFICATIONS & DRAWINGS.

2. DITCH/CULVERT CLEANING SHALL CONSIST OF DITCH BLADING AND RESHAPING, CLEARING DEBRIS, VEGETATION, SEDIMENT, ROCK AND ALL OTHER MATERIAL HINDERING THE FLOW OF RUNOFF PER CONTRACT SPECIFICATIONS & DRAWINGS.

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

AGGREGATE GRADATION REQUIREMENTS

ITEM 900

SIZE	GRADATION
4 inch	A
3 inch	B
2 inch	C
1 1/2 inch	D

ITEM 1000

SIZE	GRADATION
3 inch	A,C,F
2 inch	B,D,G,H

ITEM 1200

SIZE	GRADATION
1 1/2 inch	C,C-1
1 inch	D,D-1
3/4 inch	E,E-1

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

RUM CREEK HAZARD
TIMBER SALE
ESTIMATE OF QUANTITIES*

DRAFTED BY: BLM	SCALE: NONE
DATE: APRIL 2023	SHEET: 2 OF 3

EXHIBIT C3-3

TEMP ROUTE NUMBER	FROM	TO	LENGTH	CLEARING & GRUBBING			EXCAVATION		TEMPORARY DRAINAGE SIZE			CONSTRUCTION/RECONSTRUCTION						AGGREGATE		SLOPE PROTECTION	SOIL STABILIZATION	MISCELLANEOUS		
				TOTAL ACRES	CLEARING CLASS (AVG)	CLEARING WIDTH (AVG)	COMMON	RIPPABLE ROCK	18"	24"	36"	CONSTRUCT WATER DIPS	CONSTRUCT TURNAROUND	HEAVY REGRADING	RECONSTRUCT EX. WATER DIPS	RECONSTRUCT EX. TURNAROUND	REMOVE EXIST. BERM/BARRICADE	BASE COURSE SCREENED ROCK (4"-minus)	SURF. COURSE CRUSHED ROCK (1-1/2"-minus)			INSTALL BMPs @ HYDRO POINTS OF CONCERN	MEGA GATE REPLACEMENT	RAMP OVER GAS PIPELINE
SPECIFICATION NO. →				200			300		400			500						900	1200	1400	1800	8000		
UNITS →	STA	STA	MILE	ACRE	L/M/H	FEET	CY	CY	LF	LF	LF	EA	EA	MILE	EA	EA	EA	CY	CY	CY	ACRE	EA	EA	EA
TR 15-02-A	0+00	6+40	0.12	0.44	M	30															0.15			
TR 15-02-B	0+00	8+15	0.15	0.56	M	40															0.20			
TR 22-01	0+00	4+50	0.08	0.41	H	40	200	100													0.15			
TR 07-04	0+00	7+70	0.15	0.71	H	40	225	125					1								0.30			
TEMP ROUTE TOTALS			0.50	2.12			425	225					1								0.80			

CONSTRUCTION NOTES

1. ALL TEMP ROUTE SUBGRADE OR RUNNING SURFACE WIDTHS SHALL NOT EXCEED 15 FEET.

2. TURNOUTS ARE AUTHORIZED BUT SHALL BE CONSTRUCTED AT THE AUTHORIZED OFFICERS DISCRETION AND KEPT TO A MINIMUM QUANTITY TO AVOID UNNECESSARY DISTURBANCE.

3. STA's = 100 LINEAR FEET.

4. TURNAROUND AREAS SHALL NOT EXCEED 0.25 ACRES OR 60 FOOT RADIUS.

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

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

RUM CREEK HAZARD
TIMBER SALE
ESTIMATE OF QUANTITIES*

DRAFTED BY: BLM	SCALE: NONE
DATE: APRIL 2023	SHEET: 3 OF 3

EXHIBIT C4-1

ROAD NUMBER	FROM (STA)	TO (STA)	LENGTH (MILES)	TYPICAL STATION TYPE	ALIGNMENT	ROAD WIDTH [1-3]		GRADIENT		CLEARING WIDTH				SURFACING [4]								REMARKS
										BEYOND		EXISTING ROAD(S)		BASE COURSE				SURFACE COURSE				
					MAXIMUM DEGREE OF CURVE	SUBGRADE	DITCH	MAXIMUM FAVORABLE	MAXIMUM ADVERSE	TOP CUT	TOE FILL	L	R	MINIMUM WIDTH	COMPACTION DEPTH	TYPE [2]	GRADING	MINIMUM WIDTH	COMPACTION DEPTH	TYPE [2]	GRADING	
PEAVINE/RUM CREEK AREA																						
TR 15-02-A	0+00	6+40	0.12	3		15'	-	12%	8%			5'	5'									EXISTING FOOTPRINT; MINIMAL CUT-FILL
TR 15-02-B	0+00	8+15	0.15	3		15'	-	20%	-			5'	5'									EXISTING FOOTPRINT; MINIMAL CUT-FILL
TR 22-01	0+00	4+50	0.08	3		15'	-	-	6%	5'	5'											
ANGORA/McKNABE CREEK AREA																						
TR 07-04	0+00	7+70	0.15	3		15'	-	-	15%	5'	5'											

NOTES

1. 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.

MATERIALS	CUT SLOPE	FILL SLOPE
COMMON	1/2 : 1	1 1/2 : 1
SOFT ROCK & SHALE	1/2 : 1	1 1/2 : 1
SOLID ROCK	1/2 : 1	angle of repose

2. SURFACING TYPES
   A. PIT RUN ROCK
   B. GRID ROLLED ROCK MATERIAL
   C. SCREENED ROCK MATERIAL
   D. CRUSHED ROCK MATERIAL

3. 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.

4. SURFACING
   TURNOUTS, CURVE WIDENING, AND ROAD APPROACH APRONS SHALL BE SURFACED.

5. CLEARING WIDTH
   SEE SUBSECTION 200

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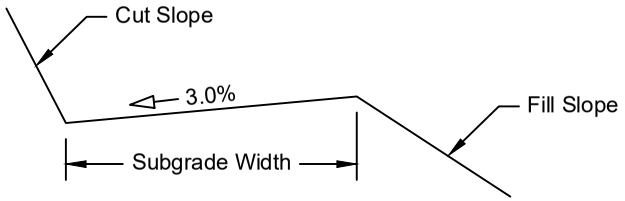
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT - MEDFORD, OREGON

RUM CREEK HAZARD TIMBER SALE SPECIFICATION SHEET

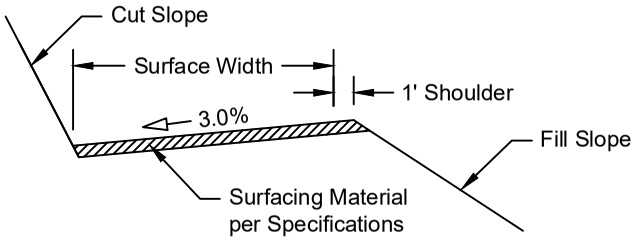
DRAFTED BY: BLM	SCALE: NONE
DATE: MARCH 2023	SHEET: 1 OF 2

EXHIBIT C4-2



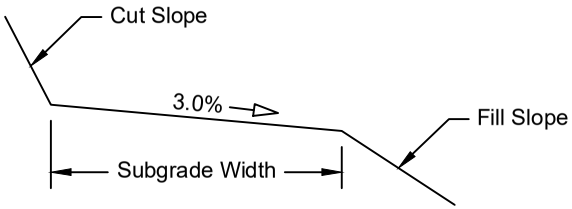
TYPICAL GRADING SECTION

TYPE 1



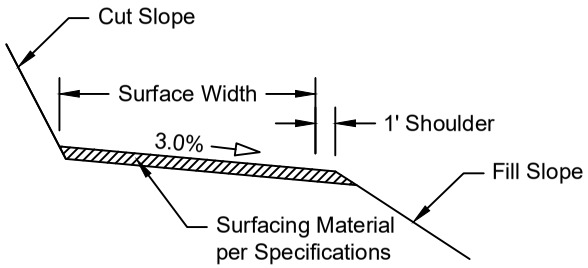
TYPICAL SURFACING SECTION

TYPE 2



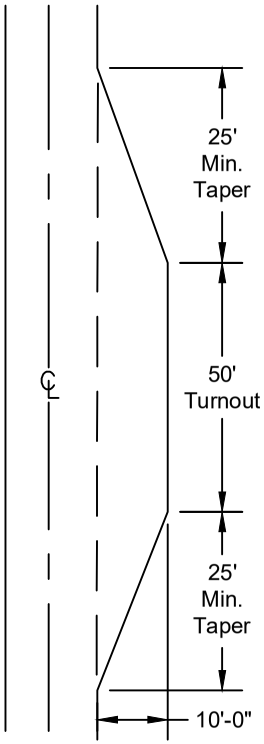
TYPICAL GRADING SECTION

TYPE 3



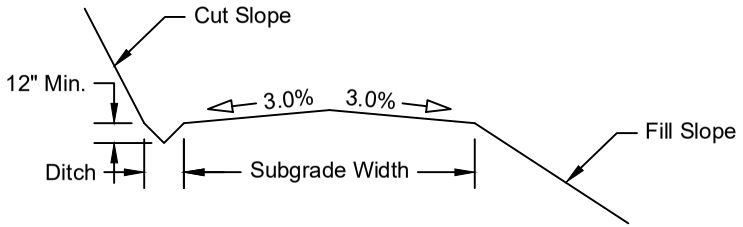
TYPICAL SURFACING SECTION

TYPE 4



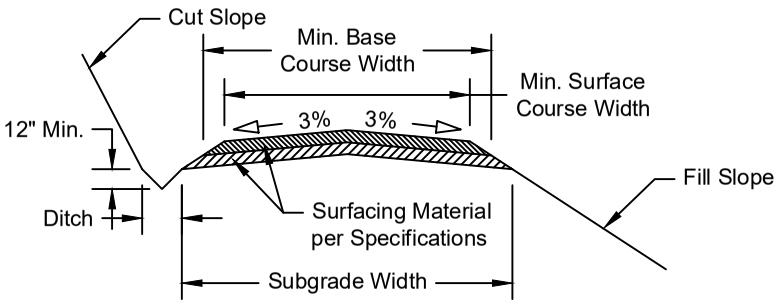
TYPICAL TURNOUT

PLAN VIEW



TYPICAL GRADING SECTION

TYPE 5



TYPICAL SURFACING SECTION

TYPE 6

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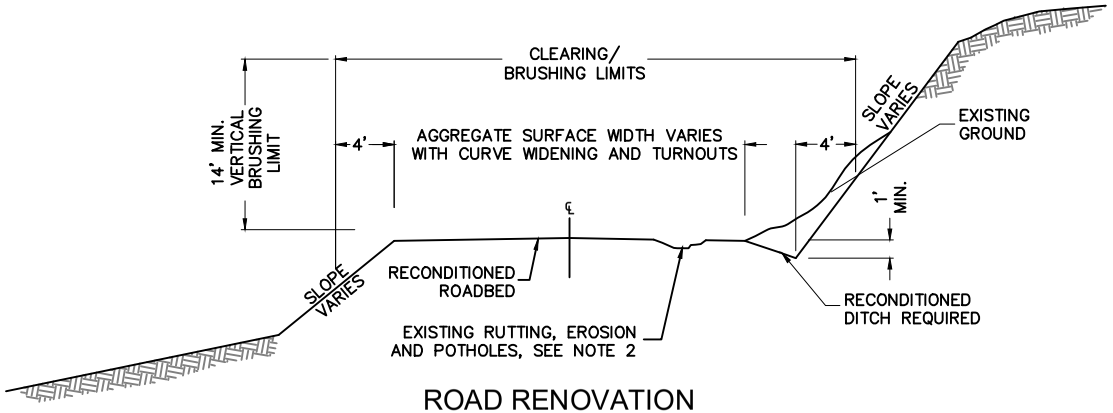
MEDFORD DISTRICT - MEDFORD, OREGON

RUM CREEK HAZARD TIMBER SALE SPECIFICATION SHEET

DRAFTED BY: BLM	SCALE: NONE
DATE: MARCH 2023	SHEET: 2 OF 2

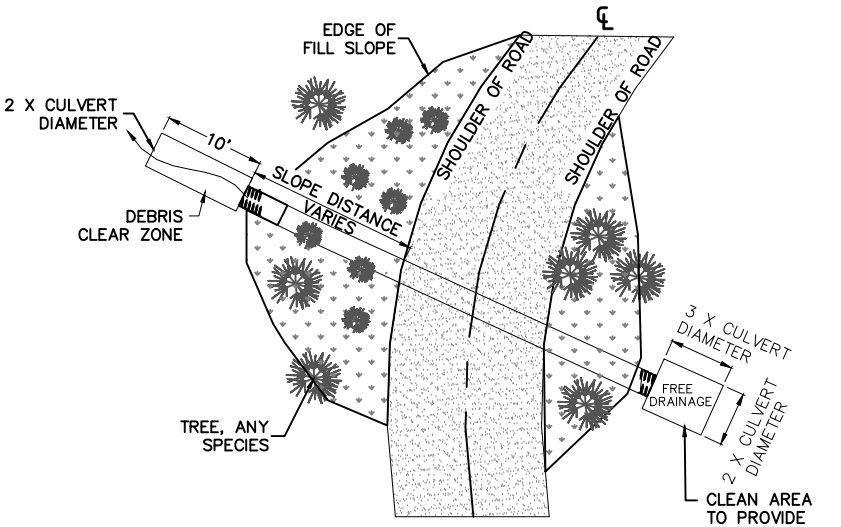
EXHIBIT C5



ROAD RENOVATION

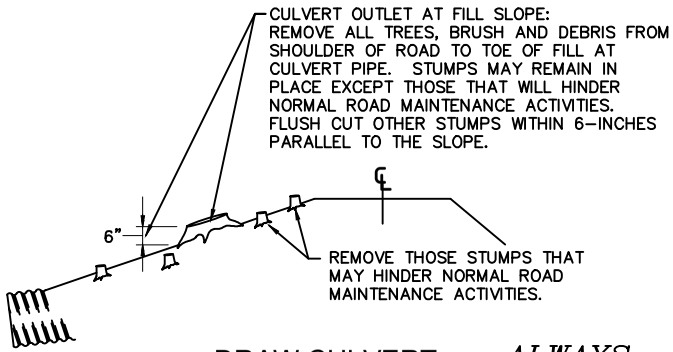
NOTES:

1. RECONDITION ROADS AS SHOWN AND IN ACCORDANCE WITH SECTION 500 OF THE SPECIFICATIONS. REQUIRED RECONDITIONING INCLUDES CURVE WIDENING AND TURNOUTS. DITCH RECONDITIONING 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 OR LISTED IN THE EXHIBIT C WORKLIST. DISPOSAL/WASTE SITES SHALL BE APPROVED BY THE AUTHORIZED OFFICER PRIOR TO USE.
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.

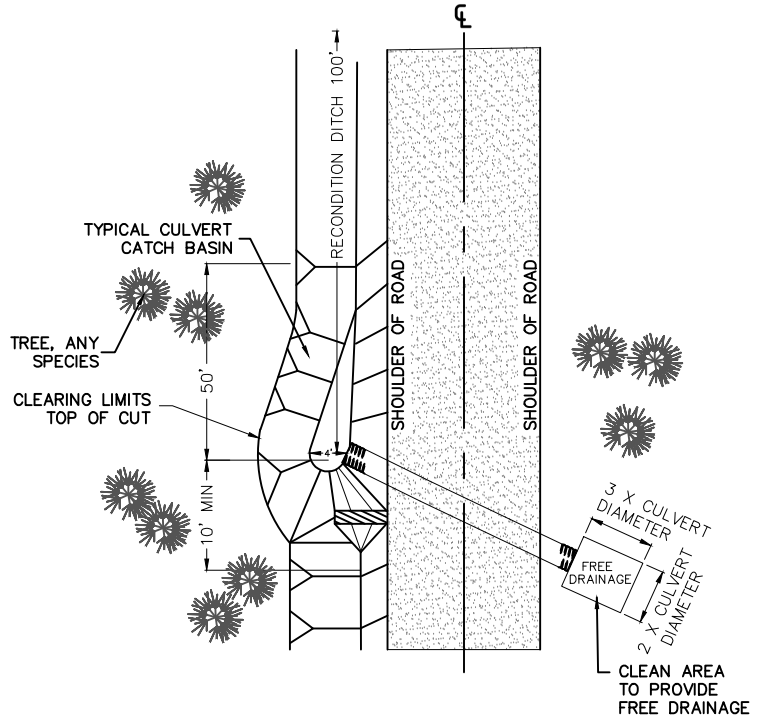


DRAW CULVERT
PLAN VIEW

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



DRAW CULVERT
PROFILE



CROSS DRAIN CULVERT
PLAN VIEW

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

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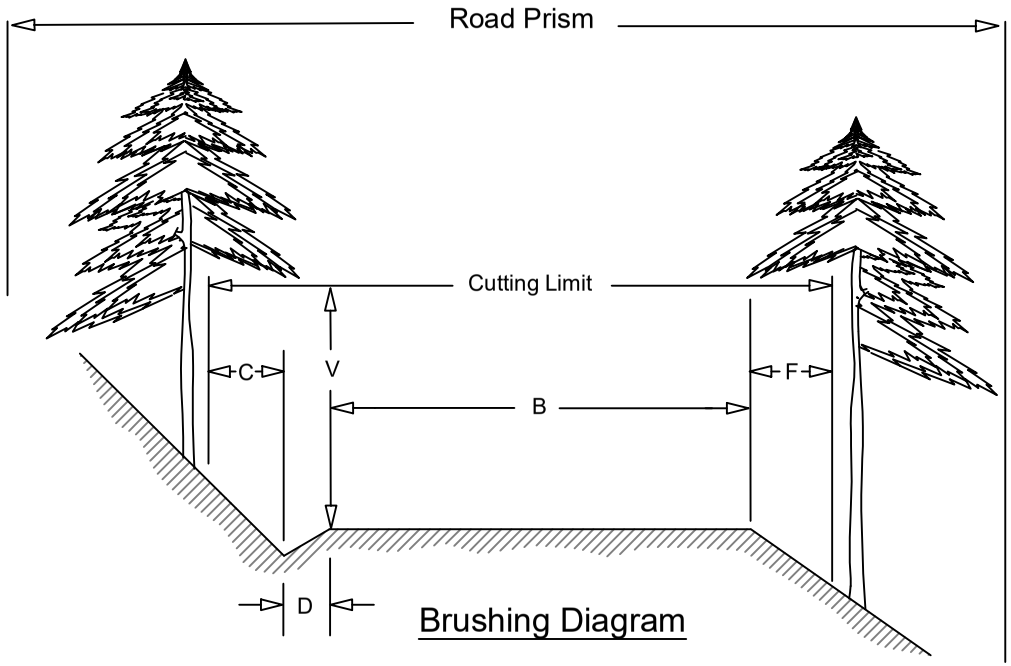
MEDFORD DISTRICT - MEDFORD, OREGON

RUM CREEK HAZARD TIMBER SALE
TYPICAL ROAD RENOVATION

DRAFTED BY: BLM	SCALE: NONE
DATE: MARCH 2023	SHEET: 1 OF 1

EXHIBIT C6



Brushing Diagram

Cutting Limit = C + D + B + F

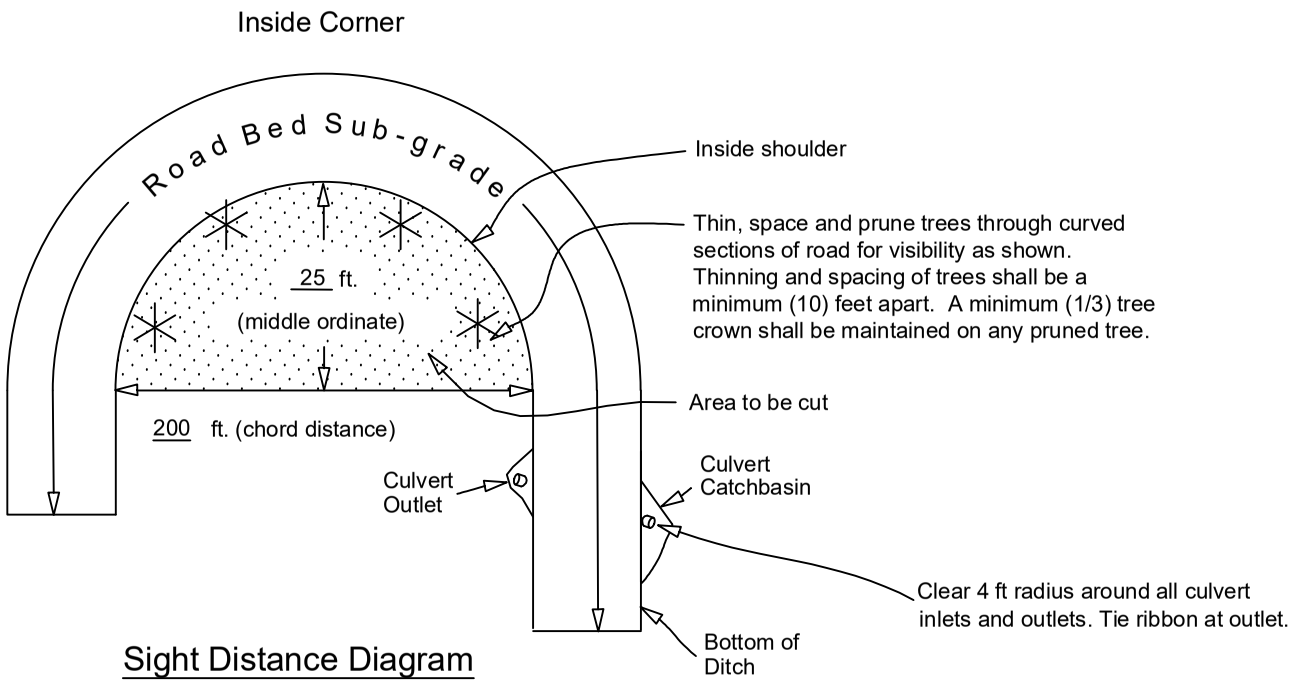
B = Road Bed Subgrade (includes turnouts)
Cut all vegetation to maximum height of 1" flush with the running surface.

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



Sight Distance Diagram

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All distances shown are horizontal except for V

revised 08/2010

UNITED STATES DEPARTMENT OF THE INTERIOR
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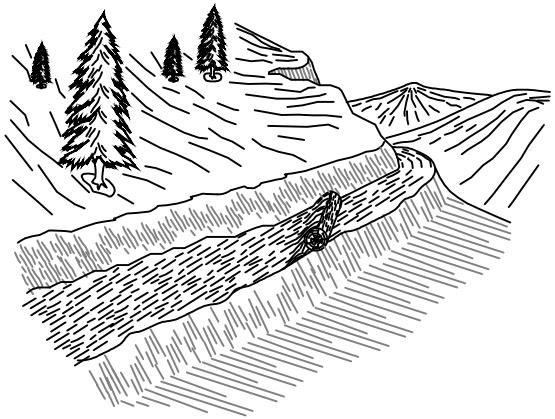
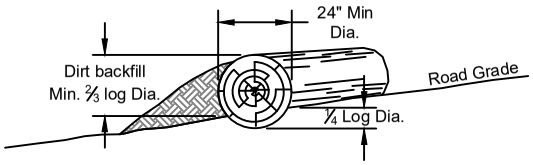
RUM CREEK HAZARD TIMBER SALE
TYPICAL ROADSIDE BRUSHING DETAIL

DRAFTED BY: BLM	SCALE: NONE
DATE: MARCH 2023	SHEET: 1 OF 1

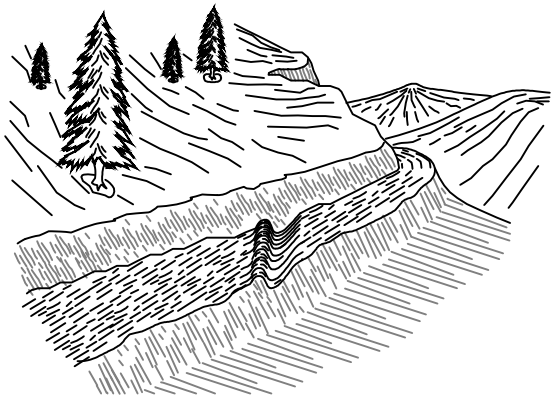
EXHIBIT C7-1



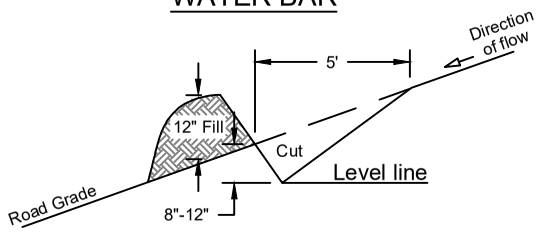
LOG BARRICADE



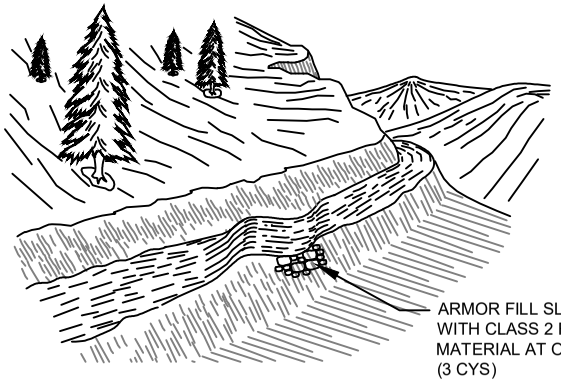
1. Log barricade shall be constructed as shown above.
2. Exact location is listed in Roads Work List.
3. All barricades shall be skewed 30 degrees.
4. The log length shall extend from the cut bank to the fill slope.
5. The minimum small end diameter of the log barricade shall be 24".



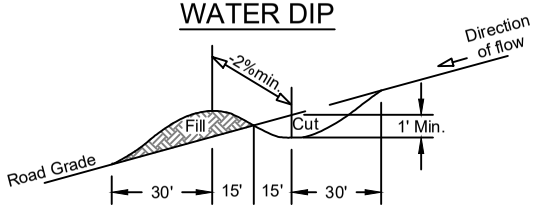
WATER BAR



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.



WATER DIP



1. Water dips shall be constructed as shown above.
2. Exact location is listed in Exhibit C Roads Work List.
3. All water dips shall be skewed 30 degrees.
4. The width shall extend across entire road running surface, 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. See Slope Protection specifications (1400).
6. Seed and mulch fill slope upon completion to stabilize side-cast material. See Soil Stabilization specifications (1800).

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.

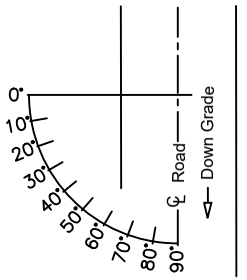
Low: Metasediments, metavolcanics, and hard shale.

WATER DIP SPACING*

ROAD GRADE	SANDY LOAM 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.

SKEW DIAGRAM



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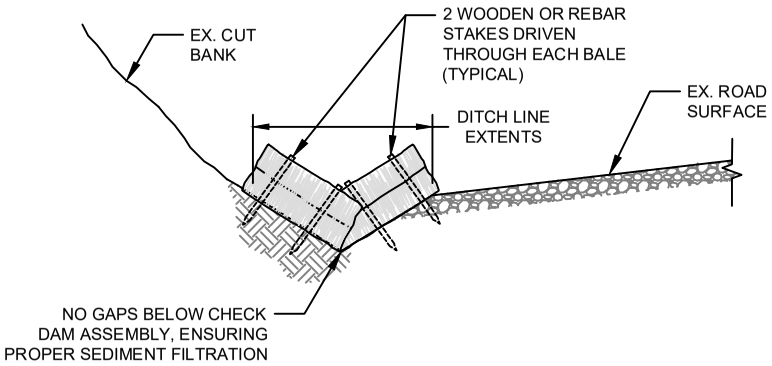
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT - MEDFORD, OREGON

RUM CREEK HAZARD TIMBER SALE DRAINAGE & EROSION CONTROL DETAILS

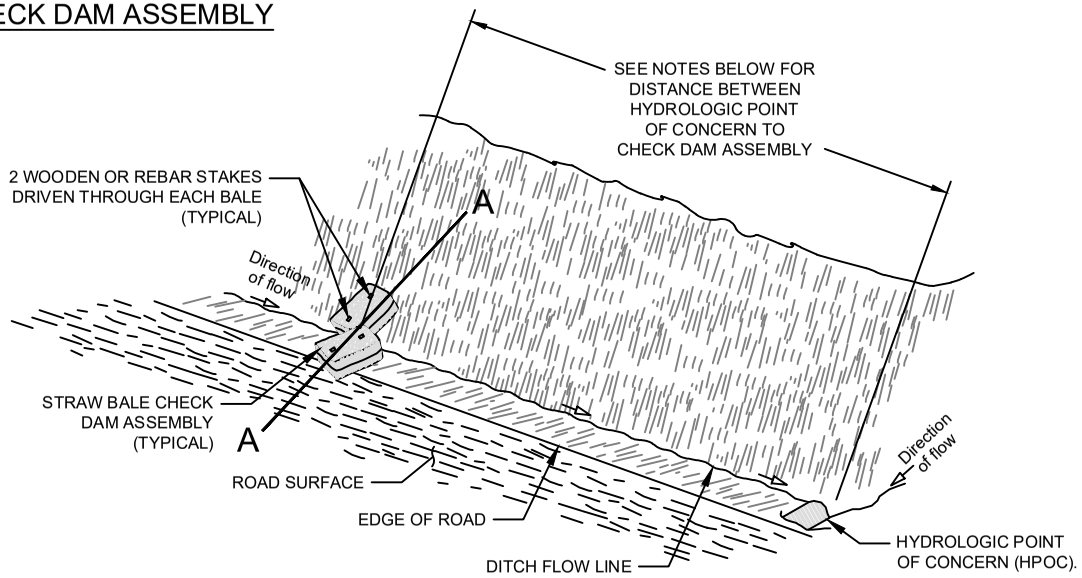
DRAFTED BY: BLM	SCALE: NONE
DATE: MARCH 2023	SHEET: 1 OF 2

EXHIBIT C7-2

STRAW BALE CHECK DAM ASSEMBLY



SECTION A-A



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.

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RUM CREEK HAZARD TIMBER SALE DRAINAGE & EROSION CONTROL INSTALLATION

DRAFTED BY: BLM	SCALE: NONE
DATE: MARCH 2023	SHEET: 2 OF 2

Roads Work List

Definitions:

AGG = Aggregate Rock Surface
BST = Bituminous Surface
CL = Center Line of Road
CMP = Corrugated Metal Pipe
CY = Cubic Yard
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 temp route construction; compacting, watering, blading and/or rolling the road surface; scarify rutted road surface as needed; clearing and reshaping ditch lines; cleaning or enlarging catch basins and outlets; cleaning the entire barrel of all culverts; regrading and/or constructing water-dips; slide removal; seeding and mulching; and removing all down trees from roadways. All road work shall comply with the contract Special Provisions, Specifications, and Exhibits.

Roadside Brushing

This consists of 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, brushing 4 horizontal feet up the cut bank slope from the centerline of ditch and 4 horizontal feet down the fill slope from the outside shoulder hinge point of the road; removing brush at the inlet and outlet of existing culverts; and removing brush, limbs, and small diameter trees along the roadway to improve sight distance. All vegetation to be cut and disposed of will be up to 8 inches (but not equal to) in diameter at breast height or less (< 8" DBH). Disposal from roadside brushing will be lop and scatter unless otherwise noted as chipping in the work list. In areas where the road crosses through private (industry or civilian) property, conifer trees shall be pruned rather than cut down. Brush shall be cut to meet regular specifications. All work shall comply with the contract Special Provisions, Specifications, and Exhibits.

Peavine/Rum Creek Area - See Exhibits C2-2 & C2-3 for Maps

34-8-34.0 Road, Seg A-B – Rum Creek Rd – BST/AGG – Sub: 16Ft – Ditch: 3Ft

MP	Description
0.00	Jct. w/ 35-8-2.0 Road (Peavine). Begin BLM maintenance on BST portion. Begin pre-haul road renovation which includes clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Material from ditch cleaning on BST portion shall be placed in designated waste disposal sites.
0.17	Jct. w/ private driveway on right.
0.32	Jct. w/ un-numbered road on left.
0.52	Existing culvert at South Fork Rocky Gulch crossing.
0.99	Unit 26-01 boundary on right.
1.03	Existing damaged/non-functional gate.
1.22	Unit 26-01 boundary on right.
1.35	Unit 27-01 boundary on right.
1.39	Unit 27-01 boundary on right.
1.40	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.71	Unit 22-02 boundary on right.
1.95	Unit 22-02 boundary on right.

2.00	Unit 22-02 boundary on right.
2.13	Unit 22-02 boundary on left.
2.29	Unit 22-02 boundary on left.
2.31	Unit 22-02 boundary on right.
2.41	Existing culvert at North Fork Rocky Gulch crossing.
2.63	Jct. w/ 34-8-22.4 Road on right.
3.08	Jct. w/ 34-8-22.2 Road on right.
3.13	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
3.23	Unit 15-05 boundary on right.
3.25	Unit 15-05 boundary on left.
3.37	Unit 15-05 boundary on left and right.
3.39	Unit 15-05 boundary on right.
3.51	Unit 15-05 boundary on right.
3.95	Existing culvert at Bailey Creek crossing.
4.06	Existing culvert at Bailey Creek crossing.
4.16	Jct. w/ 34-8-15.0 Road on left. End Segment A. Begin Segment B.
4.34	Unit 15-02 boundary on right.
4.37	Unit 15-02 boundary on left.
4.69	Unit 15-02 boundary on left and right.
4.76	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
5.21	Unit 15-01 boundary on right.
5.24	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff/landing area so not to impede drivability of traffic.
5.26	End pre-haul road renovation. Unit 15-01 boundary on right. Existing gate.

34-8-15.0 Road, Seg A – West Rum Creek Rd – AGG – Sub: 16Ft – Ditch: 3Ft

MP	Description
0.00	Jct. w/ 34-8-34.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.17	Unit 15-02 boundary on right.
0.25	Unit 15-02 boundary on left.
0.48	Unit 15-02 boundary on right. Jct. w/ Temp Route 15-02-A on right.
0.49	Jct. w/ Temp Route 15-02-B on left.
0.50	Unit 15-02 boundary on left. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.87	Unit 15-03 boundary on left.
0.88	Unit 15-03 boundary on right.
0.96	Unit 15-03 boundary on left and right.
1.05	Unit 16-01 boundary on left and right.
1.11	Unit 16-01 boundary on left and right. End pre-haul road renovation.

34-8-22.2 Road – Bailey Creek Road – AGG – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 34-8-34.0 Rd. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.19	Jct. w/ road on left.
0.38	Unit 23-01 boundary on right.
0.49	Jct. w/ road on left.
0.56	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.62	Unit 23-01 boundary on right. End pre-haul road renovation.

35-8-2.0 Road, Seg D-E – Peavine Road – NAT – Sub: 14Ft – Ditch: 3/0Ft

MP	Description
6.50	Jct. w/ 35-8-2.0 Road on right and 34-8-27.0 Road on left (BST portion). Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
6.53	Existing gate.
6.64	Existing water bar.
6.65	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
6.69	Existing water bar.
6.72	Existing water bar.
6.73	Existing water bar.
6.76	Existing water bar.
6.82	Existing water bar.
6.86	Existing water bar.
6.91	Existing water bar.
6.94	Existing culvert at South Fork Rocky Gulch crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
6.97	Existing water bar.
7.01	Existing water bar.
7.04	Existing water bar.
7.06	Existing water bar.
7.09	Existing water bar.
7.15	Existing water bar.
7.18	Existing water bar.
7.26	Existing water bar.
7.30	Existing water bar.
7.35	Existing water bar.
7.41	Existing water bar.
7.43	Existing water bar.
7.45	Existing water bar.
7.46	Jct. w/ 34-8-27.1 Road on right.
7.48	Existing water bar.

7.53	Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
7.54	Existing water bar.
7.56	Existing water bar.
7.59	Existing water bar.
7.62	Unit 22-01 boundary on right.
7.63	Existing water bar.
7.64	Jct. w/ 34-8-22.0 Road on left. Begin no ditch.
7.75	Large landing area on right. Jct. w/ Temp Route 22-01 on right. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
7.89	Unit 22-01 boundary on right.
8.46	Place 20 CY of ¾" minus aggregate from BLM stockpile located at milepost 0.89 on BLM Road #34-8-22.1 to fill sag in road.
8.52	Jct. w/ 34-8-22.1 Road on left.
8.57	Jct. w/ 34-8-22.3 Road on right. End pre-haul road renovation.

34-8-22.3 Road – Rocky Gulch – NAT – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 35-8-2.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
0.25	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.36	Remove burnt stump from hole in road. Rebuild road with approximately 20CY of ¾" minus aggregate from BLM stockpile located at milepost 0.89 on BLM Road #34-8-22.1.
0.43	Existing truck turnaround. Begin fire rehabbed section of road. Remove debris from road.
0.56	Large landing area. Waste Disposal Site (WDS). Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic. Unit 15-05 boundary on right. End pre-haul road renovation.

34-8-27.1 Road – Median – NAT – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 35-8-2.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
0.02	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.07	Existing water dip.
0.18	Existing water dip.
0.31	Existing water dip.
0.38	Existing water dip.
0.39	Potential borrow source. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.40	Unit 22-01 boundary on left.
0.42	Existing water dip.
0.50	Unit 22-01 boundary on right.

0.53	Existing water dip.
0.55	Large landing area on right. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.66	Unit 22-01 boundary on right. End pre-haul road renovation.

34-8-28.0 Road, Seg B – Mt Peavine – AGG – Sub: 16Ft – Ditch: 0Ft

MP	Description
0.33	Jct. w/ 34-8-28.0 Road on right and 35-9-1.2 Road on left (BST portion). Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.45	Existing gate.
0.79	Unit 21-01 boundary on right.
0.86	Unit 21-01 boundary on right.
0.91	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.92	Jct. w/ 34-8-21.0 on right and 34-8-21.1 on left. Existing BLM stockpile.
0.95	Jct. w/ road on left.
1.35	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.40	Jct. w/ road on right.
1.58	Jct. w/ 34-8-22.1 Road on left and right. End pre-haul road renovation.

34-8-22.1 Road, Seg B-C – North Ridge – AGG/NAT – Sub: 14Ft – Ditch: 3/0Ft

MP	Description
0.49	Jct. w/ 34-8-22.1 Road on right and 34-8-28.0 Road on left. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.50	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.89	Existing BLM stockpile. Large landing area on left. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.28	End AGG surface/begin NAT surface. Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.31	Unit 15-04 boundary on left.
1.46	Old dozer line on left.
1.58	Unit 15-04 boundary on left. End pre-haul road renovation. Waste Disposal Site (WDS). Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

34-8-21.0 Road, Seg A-B – Peavine Lookout – AGG/NAT – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 34-8-28.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
0.03	Unit 21-01 boundary on right.
0.14	End AGG surface/begin NAT surface. Jct. w/ 34-8-21.3 Road on right.
0.15	Unit 21-01 boundary on right.
0.21	Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.23	Unit 21-01 boundary on left.
0.28	Unit 21-01 boundary on left. End pre-haul road renovation.

34-8-21.3 Road – Peavine C Spur – AGG – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 34-8-21.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping. Unit 21-01 boundary on right and left.
0.06	Unit 21-01 boundary on left.
0.13	Unit 21-01 boundary on right. End pre-haul road renovation. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

Hog Creek/Angora Area - See Exhibit C2-6 for Map

34-7-22.0 Road, Seg A-B – Hog Butte S Sp – AGG – Sub: 14Ft – Ditch: 3Ft

MP	Description
0.00	Jct. w/ 35-7-11.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.10	Property line PVT/BLM.
0.29	Jct. w/ 34-7-21.6 Road on left. End pre-haul road renovation.

34-7-21.6 Road, Seg A-C (Seg A – PVT; Seg B-C – BLM) – Upper Stratton Sp
AGG – Sub: 14Ft – Ditch: 3Ft

MP	Description
0.00	Jct. w/ 34-7-22.0 Road on left and right. Begin Seg A, a Private owned and controlled road segment. See License Agreement with BTG for terms and conditions of use. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling); cleaning and reshaping ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.04	Property line BLM/PVT.
0.15	Existing culvert at Stratton Creek tributary crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
0.39	Jct. w/ private road on left.

0.45	Jct. w/ private road on right.
0.72	Existing culvert at Stratton Creek tributary crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
0.90	Existing culvert at Stratton Creek tributary crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
0.99	Existing culvert at Stratton Creek tributary crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
1.00	Jct. w/ private road on left. End Seg A; Begin Seg B.
1.26	Property line PVT/BLM.
1.27	Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.75	Jct. w/ 34-7-29.2 Road on left.
1.83	Unit 29-01 boundary on left.
1.87	Unit 29-01 boundary on left.
1.89	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
2.51	Unit 29-01 boundary on left.
2.53	Unit 29-01 boundary on left.
2.69	Unit 29-01 boundary on right.
2.73	Unit 29-01 boundary on right.
2.86	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic. End pre-haul road renovation.

34-7-29.2 Road – Maple Ridge – NAT – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 34-7-21.6 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping. Some sections may need to be widened slightly to accommodate equipment and trucks.
0.01	Property line BLM/JoCo.
0.03	Existing gate.
0.04	Property line JoCo/BLM. Unit 29-01 boundary on left.
0.06	Existing water dip.
0.08	Unit 29-01 boundary on left.
0.11	Unit 29-01 boundary on left.
0.12	Existing water dip.
0.28	Remove burnt stump from hole in road. Rebuild road with approximately 10CY of ¾" minus aggregate from BLM stockpile located at milepost 7.90 on BLM Road #35-7-11.0.
0.33	Unit 29-01 boundary on left.
0.40	Existing water dip.
0.43	Existing water dip.
0.45	Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.48	Existing water dip.

0.51	Existing water dip.
0.53	Existing water dip.
0.58	Existing water dip.
0.64	Existing water dip.
0.69	Fill-slope slide. Remove approximately 20 CYs of material from road prism. End haul waste material to nearest waste disposal site.
0.72	Existing water dip.
0.76	Existing water dip.
0.79	Existing water dip.
0.80	Unit 29-02 boundary on left.
0.82	Existing water dip.
0.85	Unit 29-02 boundary on left.
0.89	Existing water dip.
0.92	Existing water dip.
0.94	Remove burnt stump from hole in road. Rebuild road with approximately 10CY of ¾" minus aggregate from BLM stockpile located at milepost 7.90 on BLM Road #35-7-11.0.
0.96	Existing water dip.
0.99	Unit 29-02 boundary on right and left.
1.01	Existing water dip.
1.06	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff/landing area so not to impede drivability of traffic or use of landing.
1.13	Existing water dip.
1.24	Unit 29-02 boundary on right and left.
1.26	Existing water dip.
1.29	Existing water dip.
1.34	Unit 29-02 boundary on left. Existing water dip.
1.38	Existing water dip.
1.39	Unit 29-02 boundary on right.
1.42	Unit 29-02 boundary on left.
1.45	Existing water dip.
1.47	Unit 29-02 boundary on left.
1.48	Existing water dip.
1.57	Existing water dip.
1.61	Unit 29-02 boundary on right.
1.63	Unit 29-02 boundary on right and left. Existing water dip.
1.69	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
2.08	End pre-haul road renovation.

35-7-11.0 Road, Seg C3-F (Seg E – PVT; Seg D & F – BLM) – Hog Creek Road
AGG – Sub: 16Ft – Ditch: 3Ft

MP	Description
6.05	Jct. w. 34-7-27.3 on left. End BST, begin AGG surface. Begin pre-haul road renovation which includes clearing and grubbing; reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
6.07	Jct. w. 34-7-27.3 on left.
6.22	Existing quarry on right.

6.42	Jct. w/ private road on left.
6.50	Jct. w/ private road on right.
6.55	Property line BLM/PVT.
6.83	Existing culvert at Stratton Creek crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
6.85	Jct. w/ 34-7-22.0 Road on left.
6.87	Property line PVT/BLM.
7.03	Property line BLM/PVT. Begin Seg E, a Private owned and controlled road segment. See License Agreement with BTG for terms and conditions of use. Jct. w/ private road on right.
7.21	Property line PVT/BLM.
7.26	Property line BLM/PVT.
7.60	Jct. w/ 34-7-22.1 Road on left.
7.70	Property line PVT/BLM.
7.90	Existing quarry on left. Existing BLM stockpile.
7.94	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
8.13	Jct. w/ 34-7-36.0 Road on left and right. End Seg E (PVT); Begin Seg F.
8.45	Jct. w/ 34-7-15.1 Road on right.
8.48	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
8.68	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
8.82	Jct. w/ 34-7-15.4 Road (tie road) on left.

34-7-15.4 Road – Hogtie – AGG – Sub: 14Ft – Ditch: 3Ft

MP	Description
0.00	Jct. w/ 35-7-11.0 Road on left and right. Begin pre-haul road renovation which includes removal of existing barricade/berm; reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.10	Jct. w/ 34-7-36.0 Road on left and right. End pre-haul road renovation.

34-7-36.0 Road, Seg K-O (Seg L – PVT; Seg K, M-O – BLM) – Old Hog Crk Ridge
AGG/NAT – Sub: 14Ft – Ditch: 3Ft/0Ft

MP	Description
7.88	Jct. w/ 34-7-15.4 Road on right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
8.12	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
8.15	Existing quarry on left.
8.37	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

8.39	End AGG surface and begin NAT surface. Begin Seg L, a Private owned and controlled road segment. See License Agreement with BTG for terms and conditions of use.
8.40	Property line BLM/PVT.
9.06	Existing culvert at Butte Creek tributary crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
9.13	Jct. w/ Pvt spur on right.
9.15	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
9.56	Jct. w/ Pvt road on right.
9.78	Jct. w/ Pvt road on left.
10.00	Jct. w/ Pvt road on left.
10.01	Property line PVT/BLM. End Seg L (PVT); Begin Seg M (BLM).
10.50	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
10.61	Property line BLM/PVT.
10.89	Spider Junction. Jct. w/ Pvt road on right and 34-7-8.0 Road on right.
11.18	Property line PVT/BLM. Unit 17-01 boundary on left.
11.38	Jct. w/ road on right.
11.58	Unit 17-01 boundary on left.
11.71	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
12.33	Unit 17-01 boundary on left.
12.38	Unit 17-01 boundary on left.
12.43	Unit 17-01 boundary on left and right.
12.50	Unit 17-01 boundary on left and right.
12.66	End pre-haul road renovation at truck turnaround and landing area. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

35-7-11.0 Road, Seg G-I – Hog Creek Road – AGG – Sub: 16Ft – Ditch: 3Ft

MP	Description
8.82	Jct. w/ 34-7-15.4 Road on left. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
9.28	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
9.86	Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
9.94	Fill-slope slide. Remove approximately 30 CYs of material from road prism. End haul waste material to nearest waste disposal site.

10.58 Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
10.63 Fill-slope slide. Remove approximately 50 CYs of material from road prism. End haul waste material to nearest waste disposal site.
11.05 Fill-slope slide. Remove approximately 10 CYs of material from road prism. End haul waste material to nearest waste disposal site.
11.11 Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
11.13 Fill-slope slide. Remove approximately 20 CYs of material from road prism. End haul waste material to nearest waste disposal site.
11.46 Jct. w/ 34-7-15.0 Road on left.
11.63 Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
11.83 Existing culvert at Butte Creek tributary crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
11.86 Existing culvert at Butte Creek tributary crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications or approved equal.
12.31 Fill-slope slide. Remove approximately 10 CYs of material from road prism. End haul waste material to nearest waste disposal site.
12.76 Jct. w/ 34-7-11.0 Road on right.
12.94 Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
13.00 Jct. w/ 34-7-11.4 Road on left.
13.13 Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
13.80 Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
14.15 Existing culvert at Angora Creek crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications.
14.52 Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
14.66 Jct. w/ 34-7-2.0 Road on left and right. End pre-haul road renovation.

<u>34-7-2.0 Road, Seg B-A – Angora Road – AGG – Sub: 16Ft – Ditch: 3Ft</u>
**mileposts are reversed*

<u>MP</u>	<u>Description</u>
2.16	Jct. w/ 35-7-11.0 Road on left. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
2.00	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

1.86	Existing culvert at Angora Creek crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications.
1.67	Jct. w/ 34-7-11.1 Road on left.
1.66	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.56	Existing culvert at Angora Creek trib crossing. Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications.
1.46	Property line BLM/JoCo.
1.41	Jct. w/ private road on right.
1.26	Jct. w/ private on right.
1.18	Jct. w/ private on left.
0.99	Property line JoCo/BLM.
0.58	Jct. w/ 34-7-3.0 Road on left.
0.55	Existing bridge at Grave Creek crossing. This creek crossing is noted for ESA habitat (*Coho*). Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications. **A BLM haul authorization form for oversize loads can be obtained from the Authorized Officer. This form shall be properly filled out and submitted for approval a minimum of 14 days prior to driving oversized loads across the bridge.**
0.00	Jct. w/ Lower Grave Creek Road (County). End pre-haul road renovation.

Angora/McKnabe Area - See Exhibit C2-10 for Map

34-7-3.0 Road, Seg A1-A2 – Coffee Pot Rd – AGG – Sub: 14Ft – Ditch: 3Ft

MP	Description
0.00	Jct. w/ 34-7-2.0 Road on left and right. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.12	Existing culvert at Butte Creek crossing. This creek crossing is noted for ESA habitat (*Coho*). Hydrologic point of concern. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications.
0.16	Property line BLM/PVT.
0.19	Property line PVT/BLM.
0.31	Property line BLM/PVT.
0.38	Property line PVT/BLM.
0.41	Place and process 20CY of ASC from BLM stockpile located at M.P. 7.90 on BLM road #35-7-11.0.
0.51	Property line BLM/PVT.
0.62	Jct. w/ private road on left.
0.64	Property line PVT/BLM.
0.66	Jct. w/ private road/driveway on right.
0.86	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.98	Hydrologic point of concern at Reservoir Creek trib crossing. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
1.16	Hydrologic point of concern at Reservoir Creek trib crossing. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications when engaging in road

renovation activities outside of the in-stream window.

1.23 Jct. w/ 34-7-3.2 Road on right. End segment A1.

1.29 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

1.41 Jct. w/ 34-7-3.3 Road on left.

1.54 Property line BLM/PVT.

1.55 Hydrologic point of concern at Reservoir Creek crossing. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications when engaging in road renovation activities outside of the in-stream window.

1.84 Property line PVT/BLM.

2.07 Jct. w/ 34-7-3.1 Road on right. End pre-haul road renovation. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.

34-7-3.1 Road, Seg A-F – McKnabe Crk Rd – AGG – Sub: 14Ft – Ditch: 3Ft/0Ft

MP	Description
0.00	Jct. w/ 34-7-3.0 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; clearing and reshaping existing ditch lines; clearing all culvert inlets and outlets; cleaning all debris or obstructions from inside culverts; and roadside brushing and chipping.
0.13	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.28	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.41	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.83	Jct. w/ 34-7-4.3 Road on right.
0.84	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.91	Repair failing shoulder. Rebuild fill failure by benching out and rebuilding fill with 100CY of Class II riprap from a commercial source quarry. Place and process 20CY of ASC from BLM stockpile located at M.P. 7.90 on BLM road #35-7-11.0 to cap road surface. Unsuitable material shall be end hauled to a designated waste disposal site.
1.02	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.13	Property line BLM/PVT.
1.45	Property line PVT/BLM.
1.47	Property line BLM/PVT.
1.61	Jct. w/ 34-7-4.5 Road on right.
1.74	Jct. w/ private road on left.
1.87	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
2.37	Fill-slope slide. Remove approximately 30 CYs of material from road prism. End haul waste material to nearest waste disposal site.

2.39 Jct. w/ 34-7-4.0 Road on left.
2.40 Hydrologic point of concern at McKnabe Creek crossing. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
2.52 Fill-slope slide. Remove approximately 20 CYs of material from road prism. End haul waste material to nearest waste disposal site.
2.59 Hydrologic point of concern at McKnabe Creek tributary crossing. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
2.61 Jct. w/ Pvt Road on right.
2.81 Jct. w/ Pvt Road on left.
2.93 Property line PVT/BLM.
2.99 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
3.00 Jct. w/ 34-7-4.1 Road on right.
3.06 Property line BLM/PVT.
3.31 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
3.35 Property line PVT/BLM.
3.47 Hydrologic point of concern at McKnabe Creek tributary crossing. Install check dams or other approved BMPs per Exhibit C7-2 details and specifications when engaging in road renovation activities outside of the in-stream window.
3.49 Fill-slope slide. Remove approximately 50 CYs of material from road prism. End haul waste material to nearest waste disposal site.
3.60 Property line BLM/PVT.
3.65 Property line PVT/BLM.
3.77 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
3.87 Jct. w/ 34-7-5.0 Road on left.
4.33 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
4.40 Jct. w/ 34-7-5.1 Road on right.
4.42 Jct. w/ 34-7-5.2 Road on left.
4.43 Begin out-sloped road prism w/ no ditch.
4.48 Existing water dip.
4.57 Existing water dip.
4.63 Existing water dip.
4.68 Existing water dip.
4.69 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
4.72 Existing water dip.
4.78 Existing water dip.
4.84 Existing water dip.
4.89 Existing water dip.
4.95 Existing water dip.
5.00 Existing water dip.

5.01 Jct. w/ 34-7-5.3 Road on right.
5.07 Existing water dip.
5.13 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
5.16 Existing water dip.
5.21 Existing water dip.
5.25 Existing water dip.
5.30 Existing water dip.
5.40 Jct. w/ 34-7-5.4 Road on left.
5.41 Clean existing ditch out on left.
5.53 Sag in road w/ ditch out on right. Clean sag ditch out.
5.55 Clean existing ditch out on left.
5.59 Clean existing ditch out on left.
5.65 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
5.66 Jct. w/ 34-7-7.2 Road on left. Unit 07-05 boundary on left.
5.68 Existing water dip.
5.72 Existing water dip.
5.78 Unit 07-05 boundary on left.
5.80 Jct. w/ 34-7-7.0 Road on right.
5.82 Existing water dip.
5.89 Existing water dip.
5.92 Unit 07-04 boundary on left and right.
5.94 Existing water dip.
6.00 Existing water dip.
6.03 Unit 07-04 boundary on left and right.
6.05 Existing water dip.
6.08 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
6.10 Existing water dip.
6.18 Existing water dip.
6.22 Existing water dip.
6.32 Jct. w/ 34.7-7.1 Road on right.
6.36 Existing water dip.
6.38 Unit 07-03 boundary on right.
6.42 Existing water dip.
6.51 Unit 07-03 boundary on right.
6.55 Existing water dip.
6.60 Existing water dip.
6.62 Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
6.70 Unit 07-02 boundary on right.
6.81 Unit 07-02 boundary on right.
6.85 Existing water dip.
6.90 Existing water dip.
6.99 Existing water dip.
7.05 Existing water dip.

7.09	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
7.12	Unit 07-01 boundary on left.
7.15	Existing water dip.
7.17	Unit 07-01 boundary on right.
7.25	Existing water dip.
7.31	Existing water dip.
7.43	Existing water dip.
7.55	Existing water dip.
7.61	Existing water dip.
7.69	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
7.74	Existing water dip.
7.82	End pre-haul road renovation. Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff/landing area so not to impede drivability of traffic.

34-7-7.2 Road, Seg A – McKnabe Sp – NAT – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 34-7-3.1 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
0.11	End pre-haul road renovation. Jct. w/ Temp Route 07-04 on right.

34-7-5.2 Road – McKnabe D Sp – AGG – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 34-7-3.1 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
0.06	Existing water dip.
0.11	Existing water dip.
0.17	Existing water dip.
0.20	Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.24	Existing water dip.
0.35	Existing water dip.
0.41	Existing water dip.
0.46	Existing water dip.
0.51	Existing water dip.
0.54	Existing water dip.
0.57	Waste Disposal Site (WDS) on left. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.62	Existing water dip.
0.66	Unit 05-01 boundary on left.
0.77	Existing water dip.
0.80	Existing water dip.
0.85	Existing water dip.

0.94	Unit 05-01 boundary on left.
0.95	End pre-haul road renovation. Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff/landing area so not to impede drivability of traffic.

34-7-5.1 Road – McKnabe B Sp – AGG – Sub: 14Ft – Ditch: 0Ft

MP	Description
0.00	Jct. w/ 34-7-3.1 Road. Begin pre-haul road renovation which includes reshaping road surface (blading, watering, and rolling) to road specifications; scarify rutted road surface as needed; and roadside brushing and chipping.
0.06	Existing water dip.
0.14	Existing water dip.
0.19	Existing water dip.
0.32	Existing water dip.
0.35	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.42	Existing water dip.
0.47	Fill-slope slide. Remove approximately 10 CYs of material from road prism. End haul waste material to nearest waste disposal site.
0.51	Existing water dip.
0.56	Existing water dip.
0.58	Fill-slope slide. Remove approximately 30 CYs of material from road prism. End haul waste material to nearest waste disposal site.
0.61	Existing water dip.
0.65	Existing water dip.
0.77	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
0.85	Existing water dip.
1.01	Existing water dip.
1.15	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.16	Unit 06-03 boundary on right.
1.22	Unit 06-03 boundary on left.
1.24	Existing water dip.
1.28	Unit 06-03 boundary on left.
1.29	Existing water dip.
1.30	Unit 06-03 boundary on right.
1.35	Existing water dip.
1.43	Existing water dip.
1.52	Existing water dip.
1.74	Waste Disposal Site (WDS) on right. Place slump, slide, and ditch line material on stable area well off running surface of road and outside of turnoff area so not to impede drivability of traffic.
1.76	Existing water dip.
1.77	Unit 06-01 boundary on right.
1.82	Unit 06-01 boundary on left.
1.86	Existing water dip. Unit 06-01 boundary on left.
1.87	Unit 06-01 boundary on right.

1.89 Existing private gate. End pre-haul road renovation.

Temporary Routes

All Temporary Routes are native surface and out-sloped, unless noted otherwise. Subgrade width shall not exceed 15 feet (not including turnouts and landings). All temp routes shall be winterized by October 15th if access is needed over two dry seasons. Winterization includes water barring, seeding, mulching, and temporarily barricading per Exhibit D details and specifications.

Peavine/Rum Creek Area

Temp Route 15-02-A (See Exhibit C2-4 for Map)

STA	Description
0+00	Jct. w/ 34-8-15.0 Road. Begin temp route reconstruction (minimal cut-fill).
0+80	Unit 15-02 boundary on right.
6+40	End temp route reconstruction.

Temp Route 15-02-B (See Exhibit C2-4 for Map)

STA	Description
0+00	Jct. w/ 34-8-15.0 Road. Begin temp route reconstruction (minimal cut-fill). Unit 15-02 boundary on left and right.
4+25	Unit 15-02 boundary on right.
8+15	End temp route reconstruction.

Temp Route 22-01 (See Exhibit C2-5 for Map)

STA	Description
0+00	Jct. w/ 35-8-2.0 Road. Begin temp route construction (typical cut-fill) off large landing area. Unit 22-01 boundary on left and right.
4+50	Construct landing area. End temp route construction.

Angora/McKnabe Creek Area

Temp Route 07-04 (See Exhibit C2-13 for Map)

STA	Description
0+00	Jct. w/ 34-7-7.2 Road. Begin temp route construction (typical cut-fill).
1+20	Unit 07-04 boundary on left and right.
7+70	Construct landing area. End temp route construction.

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 Purchaser's 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. **BRIDGE LOAD RESTRICTIONS:**
   - **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 (See R-4).**
   - **Bridges and/or structures without weight restrictions are located at:**
     1) Road Number 35-7-4.0 Galice Road aka Hellgate Bridge
     2) Road Number 34-7-2.0 Angora Road at milepost 0.55
   - **BLM haul authorization form for weight restricted structures and/or oversize loads can be obtained from the Authorized Officer. This form shall be properly filled out and submitted for approval a minimum of 14 days prior to driving oversized loads across the bridge.**

3. DAMAGE:
   - The Purchaser's 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 other 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.

4. PERMITS:
   - All required permits are the responsibility of the Purchaser.

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

ACTIVITY	START DATE	END DATE
Road renovation	May 15	Oct. 15
In stream work	June 15	Sept. 15

6. 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, updated January 2022.
   - Construct silt fences, or approved equal, 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.

7. DUST ABATEMENT:
   - The application of dust abatement materials such as Lignin, Mag-chloride, or approved petroleum-based dust abatement products shall be restricted from application just after severely wet weather, at stream crossings to be designated by the Authorized Officer, or other locations that could result in direct delivery to a water body.
   - All dust abatement applications shall be approved by the Authorized Officer prior to application.

8. 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.

9. 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 by the Authorized Officer or Project Engineer prior to entering BLM lands. Provide a 48 hours' notice of inspection to the Authorized Officer or Project Engineer prior to mobilization.

10. SOIL STABILIZATION:
    - All disturbed soil shall be seeded and mulched. The Purchaser's Representative/Contractor shall apply native grass seed and Certified Weed Free straw mulch for soil stabilization operations. The Purchaser shall supply native seed and certified weed free straw. Native seed and certified weed free straw may be purchased from the BLM, **if available**.

11. 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 timeline. Seasonal restrictions for stream work and wildlife will still apply.
    - Loose material cleaned from ditch lines and/or slide material shall not be placed where it can enter wetlands, riparian reserves, floodplains, and waters of the State.

- Suspend ground-disturbing activity if projected forecasted rain will saturate soils to the extent that there is potential for movement of sediment from the road to wetlands, floodplains, and waters of the State. Cover or temporarily stabilize exposed soils during work suspension. Upon completion of ground-disturbing activities, immediately stabilize fill material over stream crossing structures. Measures could include but are not limited to erosion control blankets and mats, soil binders, soil tackifiers, or placement of slash.

12. ROADSIDE BRUSHING:
    - While roadside brushing, there shall be no scarring or other damage of the tree trunk or bole allowed. All debris resulting from roadside brushing activities shall be scattered downslope or chipped according to specifications. 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/maintenance operations (including turnouts), shall be removed in such a way as to not cause damage to the drainage ditch or the roadbed. If such damage does occur, the Purchaser's Representative/Contractor shall properly repair the road damage immediately.

13. 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 temporarily barricading. All temp routes shall be water barred, barricaded, seeded, and mulched after use, unless otherwise specified.
    - Clearing, grubbing, and excavation activities of temp routes shown on Exhibit C maps shall be performed in accordance with specifications.
    - Temp routes shall be constructed to the minimum necessary width for safe timber harvest activities.

14. COMMERCIAL AGGREGATE:
    - Aggregate supplied/furnished for this work shall be direct from an accredited commercial source and can be stockpiled during 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.

15. 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.

16. 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 shall 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 can be made during dry conditions of the wet season pending approval from a BLM Authorized Officer.

TIMBER SALE ROAD SPECIFICATIONS

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GENERAL – 100

101 - Prework Conference(s):

A prework conference will be held prior to the start of new construction, improvement, and operations. 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 his representative(s), subcontractor(s) and/or his 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.

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.

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

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

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

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

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

Spalls - Flakes or chips of stone.

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

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

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

Subbase - Reinforcement of the subgrade with large particles of pitrun 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.

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.

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 cohensionless soils.

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

103 - Compaction equipment shall meet the following requirements:

103b - Sheepfoot rollers. A tamping roller unit shall consist of two watertight metal drums mounted in frames in such manner as to be fully oscillating, together with a tractor having sufficient weight and power under actual working conditions to pull the roller drums at a minimum speed of 2.5 miles per hour. The drums shall be no less

than 60 inches in diameter and no less than 54 inches in length, measured at the drum's surface, and shall be studded with tamping feet projecting not less than 7 inches from the face of the drums.

The distance between circumferential rows of tamper feet shall be such that the diagonal distance from any foot to the nearest foot in each adjacent row shall be not more than 12 inches. The cross-sectional area of the face of each tamper foot, measured perpendicular to the axis of the stud, shall be not less than 5-1/2 square inches nor more than 8 square inches.

The weight of the tamping-roller unit shall be such as to exert a minimum pressure of 250 pounds per square inch on the ground area in contact with the tamping feet, and the roller shall be so designed that the weight may be increased to exert a pressure up to 500 pounds per square inch on the ground area in contact with the tamping feet. The ground pressure shall be determined by dividing the total weight of the roller unit, not including the weight of the tractor, by the total cross-sectional area of the tamping feet in one row of tamping feet parallel to the axis of the roller.

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.

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.

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 10 feet back of the top of the cut slope and 5 feet out from the toe of the fill slope.

203 - Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsection 202 and as shown on the plans.

203b - Standing trees and snags to be cleared shall be felled within the limits established for clearing unless otherwise authorized.

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, 204d, and 204e 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.

204e - Roots and embedded wood material shall be removed to a depth not less than 1 foot below embankment subgrades or slope surfaces.

205 - Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections.

206 - Clearing and grubbing debris shall be disposed of by burning in accordance with Subsection 207 and piling in accordance with Subsection 211 at the following road locations:

Road No.	From M.P./Sta	To M.P./Sta	Activity Type	Disposal Method
TR 15-02-A	0+00	6+40	Road Reconstruction	Pile & Burn
TR 15-02-B	0+00	8+15	Road Reconstruction	Pile & Burn
TR 22-01	0+00	4+50	Road Construction	Pile & Burn
TR 07-04	0+00	7+70	Road Construction	Pile & Burn

207 - The Purchaser shall prepare a burning plan for the disposal of clearing and grubbing debris in accordance with local and state laws, rules, and regulations and complying with the requirements for burning operations as set forth under Subsections 207a and 207b of these specifications. The plan shall be approved in writing by the Authorized Officer prior to burning.

207a - Burning shall utilize methods which produce intense heat with no visible smoke emissions except that minimal emissions of smoke associated with starting and stopping the operations will be tolerated. Prior to beginning burning the Purchaser shall obtain a burning permit from the regulating authority enforcing the air pollution control standards for the area and shall furnish a copy of the permit to the Authorized Officer. At the conclusion of each burning session, the fire shall be completely extinguished so that no smoldering debris remains.

Debris to be burned shall be dirt free. Final placement of debris into the actual burning area shall be done with a crane, loader, or other suitable lifting equipment. The use of dozers will not be permitted, unless they are equipped with a brush blade. Stumps larger than 3 feet in diameter shall be split prior to burning.

207b - The Purchaser may use a burning method of his own choosing which complies with the requirements of Subsection 207a and has the prior written approval of 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 **can** be reduced to chips of an acceptable size and disposed of by scattering.

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.

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.

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.

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.

305c - Embankments formed of material containing less than 25 percent rock not larger than 8 inches in the greatest dimension shall be placed in 12-inch layers. Material containing more than 25 percent rock not larger than 12 inches in the greatest

dimension shall be placed in successive layers not exceeding 2 feet in thickness.

306 - Layers of embankment material, final subgrade and selected roadway excavation material as specified under Subsections 305a, 305b, and 317 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 103b, 103f, 103g, 103h, and 103i.

306a - Minimum compaction for each layer of embankment and selected roadway excavation material placed at optimum moisture shall be 4 passes over each full-width layer or fraction thereof.

306e - The **final temporary road subgrades** including landings shall be compacted to full width with compacting equipment conforming to the requirements of Subsections 103b, 103f, 103g, 103h, and 103i. Minimum compaction shall be 1 hour of continuous compacting for each 6 stations of road or a fraction of as measured along the center line of the constructed road.

306f - Compaction of embankment layers placed as specified under Subsection 305b above 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.

309 - The top of cut slopes shall be rounded by blending into the adjacent terrain for a distance not less than 1 foot and not more than 3 feet beyond the top of the cut. Rounding shall be performed in soils that can be shaped without ripping or blasting.

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.

312 - When material, except solid rock, encountered in cuts at subgrade, is suitable for use in forming the finished roadbed, the top 6-inch layer of the subgrade shall be thoroughly scarified for the full width of the roadbed. Roots, sod, and other deleterious material or stones that will not pass a 6-inch square opening shall be removed. The scarified material shall be processed to the optimum moisture content suitable for maximum

density and compacted in accordance with these specifications.

313 - In cut areas where solid rock is encountered at, or near subgrade, the rock shall be excavated to a minimum depth of 6 inches below subgrade elevation and the excavated area backfilled with suitable material. The backfill material shall be processed to the optimum moisture content suitable for maximum density and compacted to full width in accordance with the requirements of Subsection 306.

314 - When heavy clays, muck, clay shale, or other deleterious material for forming the roadbed is encountered in cuts at subgrade, it shall be excavated to a minimum depth of 2 feet below the subgrade elevation and the excavated area backfilled with a selected borrow material approved by the Authorized Officer. The backfill material shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density in accordance with the requirements of Subsection 306. Unsuitable material shall be disposed of as directed by the Authorized Officer.

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.

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.

324 - Excavated material shall not be allowed to cover boles of standing trees to a depth in excess of 2 feet on the uphill side.

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

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.

501a - This work shall include the removal and disposal of slides in accordance with these specifications.

502 - The existing road surface shall be scarified (where needed) to its full width and to a depth of 6 inches to eliminate surface irregularities and bladed and shaped to the lines, grades, dimensions, and typical cross sections shown on the plans.

502a - Rocks larger than 4 inches in maximum dimension shall be removed from the scarified layers of the roadbed. Material so removed will not be permitted to remain on road shoulders or in ditches.

502b - Drainage ditches shall be bladed and shaped in accordance with the lines, grades, dimensions, and typical cross sections shown on the plans.

503a - Debris from the slides at the following locations:

Road No.	M.P.	CY
34-7-29.2	0.69	20
35-7-11.00	9.94	30
	10.63	50
	11.05	10
	11.13	20
	12.31	10
34-7-3.1	2.37	30
	2.52	20
	3.49	50
34-7-5.4	0.47	10
	0.58	30

shall be hauled to designated disposal sites as listed in the worklist.

504 - Scarified material and existing road surfaces 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 103b, 103f, 103g, 103h, and 103i and as specified in the worklist.

504a - Minimum compaction required shall be 1 hour of continuous rolling for each 5 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 (designated) pipe structures shall be cleared of rock and 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.

508 - Vegetation encroaching on the roadbed, drainage ditches, and culverts inlets and outlets on existing roads shall be removed by cutting and disposed of in accordance with Subsection 2100 of these 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 3 days notice prior to final inspection of the grading operations.

WATERING - 600

601 - This work shall consist of furnishing and applying water required for the compaction of embankments, roadbeds, backfills, base courses, surface courses, finishing and reconditioning of existing roadbeds, laying dust, or for other uses in accordance with these specifications.

602 - Water, when needed for compaction or laying dust, shall be applied at the locations, in the amounts, and during the hours as directed by the Authorized Officer. Amounts of water to be provided will be the minimum needed to properly execute the compaction requirements in conformance with these specifications, and for laying dust during work periods.

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 road bed.

605 - The Purchaser shall secure the necessary water permits and pay all required water fees for use of water source(s) selected by the Purchaser and approved by the Authorized Officer.

AGGREGATE SURFACE COURSE - 1200
CRUSHED ROCK MATERIAL

1201 - This work shall consist of loading, hauling, and placing one or more layers of crushed rock material on roadbeds and base courses approved for placing crushed rock material from designated BLM stockpiles in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans. Material not conforming to these specifications will be rejected, and shall be removed from the road at the purchaser's expense.

1202 - Crushed rock materials used in spot rocking work shall be obtained from BLM stockpiles shown on the plans.

1202a - Crushed rock materials used in surfacing work shall be obtained from commercial source(s) selected by the Purchaser at his option and expense, providing the rock materials furnished comply with the specifications.

1203 - When crushed rock material is produced from gravel, not less than 65 percent by weight of the particles retained on the No. 4 sieve will have 2 manufactured fractured faces. If necessary to meet the above requirements or to eliminate an excess of filler, the gravel shall be screened before crushing.

1204 - Crushed rock material from commercial sources only shall consist of hard durable rock fragments conforming to the following gradation requirements:

TABLE 1204

AGGREGATE SURFACE
COURSE CRUSHED ROCK
MATERIAL
Percentage by weight passing square mesh sieves
AASHTO T 11 & T 27
GRADATION

Sieve Designation	C	**C-1**	D	D-1	E	E-1
1-1/2-inch	100	**100**	-	-	-	-
1-inch	-	**-**	100	100	-	-

3/4-inch	50-90	**60-90**	-	70-98	100	100
1/2-inch	-	**-**	-	-	-	70-98
No. 4	25-50	**30-55**	30-60	36-60	40-75	44-70
No. 8	-	**22-43**	-	25-47	-	30-54
No. 30	-	**11-27**	-	12-31	-	15-34
No. 40	5-25	**-**	5-30	-	5-35	-
No. 200	2-15	**3-15**	3-15	3-15	2-15	3-15

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

1206 - Crushed rock material shall show a durability value of not less than 35 as determined by AASHTO T210.

1207 - That portion of crushed rock material passing the No. 40 sieve, including blending filler, shall have a liquid limit of not more than 35 and a plasticity index of not less than 4 and not more than 12 as determined by AASHTO T 89 and AASHTO T 90.

1208 - If additional binder or filler material is necessary to meet the grading or plasticity requirements or for satisfactory bonding of the material, it shall be uniformly blended with the crushed rock material at the crushing and screening plant prior to placing on the road, unless otherwise agreed. The material for such purposes shall be obtained from sources shown on the plan and shall be free from stones, vegetative matter, and other deleterious materials.

1208a - Each layer of crushed rock material shall be thoroughly mixed on the roadbed by alternately blading, to full depth, until a uniform mixture has been obtained. The mixture shall then be spread to full width. When completed, the spreading shall produce a surface which is smooth, presents uniform shoulder lines, and conforms to the specified cross section.

1209 - Shaping and compacting of roadbed or base course shall be completed and approved in writing, prior to placing crushed rock material, in accordance to the requirements of Subsections 300 and 500. Notification for final inspection prior to rocking shall be 72 hours prior to the inspection and shall be 5 days prior to start of surfacing operations.

1210 - Crushed rock material conforming to the requirements of these specifications shall be placed on the approved roadbed and base courses in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Compacted layers shall not exceed 4 inches in depth. When more than one layer is required, each shall be shaped, processed, compacted, and approved in writing by the Authorized Officer before the succeeding layer is placed. Irregularities or depressions that develop during compaction of the top layer shall be corrected by loosening the material at these places and then adding or removing crushed rock material until the surface is smooth and uniform.

1210a - Crushed rock material used to repair or reinforce soft, muddy, frozen, yielding, or rutted roadbed shall not be construed as surfacing required by this specification.

1212 - Each layer of crushed rock material placed, processed, and shaped as specified shall be moistened or dried to a uniform moisture content suitable for maximum compaction and compacted to full width by compacting equipment conforming to the requirements of Subsections 103f, 103g, 103h, or 103i . Minimum compaction shall be 6 passes over each full-width layer, or fraction thereof.

1215 - The Purchaser is authorized to remove BLM stockpiled ¾" minus crushed rock material, truck measure, from BLM stockpiles as shown on the Ex C2 maps, for placement on the road.

SLOPE PROTECTION - 1400

1401 - This work shall consist of furnishing, hauling, and placing stone materials for slope protection structures in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross- sections shown on the plans. Material not conforming to these specifications will be rejected and shall be removed from the slope protection structure at the purchaser's expense and as directed by the Authorized Officer.

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.):

Volume/ Cubic Foot	*Average Dimension in inches*	*Approximate Weight in Pounds*
12	*27.5 x 27.5 x 27.5*	*2100*
6	*21.8 x 21.8 x 21.8*	*1050*
4	*19.1 x 19.1 x 19.1*	*700*
3	*17.3 x 17.3 x 17.3*	*525*

1	*12.0 x 12.0 x 12.0*	*175*
2/3	*10.5 x 12.0 x 12.0*	*120*
½	*9.5 x 9.5 x 9.5*	*88*
1/3	*8.3 x 8.3 x 8.3*	*60*
¼	*7.6 x 7.6 x 7.6*	*44*
1/6	*6.6 x 6.6 x 6.6*	*30*
1/8	*6.0 x 6.0 x 6.0*	*22*
1/100	*2.6 x 2.6 x 2.6*	*2*

1404 - The material shall be well graded from the smallest to the maximum size specified. Stones smaller than the specified 10 percent size shall consist of spalls and fine rock fragments so distributed as to provide a stable compact mass.

1405 - Rip rap shall conform to the following gradations:

TABLE 1405

Class	Approx. Cubic Dimension (inches)	Sphere Diameter (inches)	% of Total Volume Smaller than Size of Stone
1	6-8	8	100
	5-6	6	80
	2-5	6	50
	0-2	2	10
2	**8-10**	**12**	**100**
	6-8	**8**	**80**
	3-6	**6**	**50**
	0-3	**4**	**10**
3	14-16	21	100
	10-14	18	80
	5-10	12	50
	0-5	6	10
4	18-20	24	100
	14-18	22	80
	6-14	18	50
	0-6	8	10
5	26-28	36	100
	20-26	32	80
	8-20	25	50
	0-8	10	10
6	28-34	42	100
	22-28	34	80
	10-22	27	50

	0-10	12	10

*Rocks smaller than six inches in diameter are not counted.

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.

1410 - The embankment slopes at the following locations:

Road No.	From Sta./M.P.	To Sta./M.P.
34-7-3.1	0.91	0.91

shall be protected and stabilized by placement of rock materials to form a slope-protection structure conforming to the construction requirements and details of these 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.

1703 - This work shall consist of furnishing and installing sediment fences in accordance with these specifications and in reasonably close conformity with the lines and grades as directed by the Authorized Officer.

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.

1706a - The Purchaser shall perform, during the same construction season, erosion control measures on all exposed excavation, borrow, and embankment areas.

1707 - Completed and partially completed segments of roads at the following location(s):

Road No.	From M.P.	To M.P.
TR 15-02-A	0+00	6+40
TR 15-02-B	0+00	8+15
TR 22-01	0+00	4+50
TR 07-04	0+00	7+70

carried over the winter and early spring periods shall be stabilized by 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.

1711 - The Purchaser shall construct catch basins and energy dissipators for pipe culverts conforming to the requirements and details shown on the respective exhibits and on the plans.

1713 - Where newly constructed logging spur roads join with existing surfaced roads, the Purchaser shall construct a sag in the spur road profile in accordance with the requirements and details and directed by the Authorized Officer.

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 and as shown on the plans. 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 in accordance with these specifications at the following locations:

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: September 1	To: October 15 (of the same year)

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 Sec. 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

Road No.	From M.P./Sta	To M.P./Sta	Activity Type
TR 15-02-A	0+00	6+40	Road Construction
TR 15-02-B	0+00	8+15	Road Construction
TR 22-01	0+00	4+50	Road Construction
TR 07-04	0+00	7+70	Road Construction

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.

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 **0.80 acres** designated for treatment as shown on the plans and as specified under Subsectionss 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	2,000 lbs./acre

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

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, fertilizer spreaders, or other approved mechanical seeding equipment may be used when seed and fertilizer are to be applied in dry form.

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.

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 Sheet (Exhibit C6) of this exhibit, at designated locations as shown in the plans.

2102 - Roadside brushing may be performed mechanically with self powered, self-propelled equipment or manually with hand tools, including chain saws.

2103 - Vegetation cut manually or mechanically less than **7** inches in diameter when measured at D.B.H.O.B. shall be cut to a maximum height of 1 inch above the ground surface or above obstructions such as rocks or stumps on cut and fill slopes and all limbs below the 1 inch area will be severed from the trunk.

2103a - Vegetation shall be cut and removed from the road bed between the outside shoulder(s) 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 7 inches in diameter at D.B.H.O.B. 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 6 inches of the trunk to produce a smooth vertical face. Removal of trees larger than 7 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 6 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 in excess of 1 foot in height, shall be cut within these areas.

2108 - Self propelled equipment shall not be permitted on cut and fill slopes or in ditches.

2110 - Vegetation 7 inches and smaller in diameter shall be chipped. Chips shall be scattered downslope from the roadway. Vegetation over 7 inches in diameter shall be disposed of by direction of the Authorized Officer.

2114 - Sections of roadway to have vegetation removed will be marked at start and stop points with one piece each of white and red ribbon and red-topped painted stakes.

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.

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Sale: Rum Creek Hazard TS
Sale Date: 07-27-2023
Prep. By : Brown
Tract No: ORM07-TS-2023.0011

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1.1) Road Use - Amortization: $0.00/7516 MBF = $0/MBF

Road Maintenance Obligation:

(2.1) BLM Maintenance		$33,378.67
(2.2) BLM Rockwear	$0.00	
(5.1) Purchaser Maintenance Rockwear	$21,824.28	
Total Rockwear Payable to BLM		$21,824.28
(3.1) 3rd Party Maintenance		$0.00
(3.2) 3rd Party Rockwear		$1,923.21
(4.1) Other Maintenance Payments		$0.00
Total Maintenance Fee Obligation (2.1-5.1)		$57,126.16

Purchaser Maintenance Allowances:

(5.2A) Move In	$10,356.00
(5.2B) Culverts, Catch Basins, Downspouts	$16,212.68
(5.2C) Grading, Ditching	$34,762.96
(5.2D) Slide Removal and Slump Repair	$0.00
(5.2E) Dust Palliative (Water)	$26,900.10
(5.2F) Surface Repair (Aggregate)	$51,000.00
(5.2G) Other	$0.00
Total Purchaser Maintenance Allowances (5.2A-5.2G)	139,231.74

(2.1-5.2G) Cost ($57,126.16 + 139,231.74) = $196,357.90
Cost/MBF 196357.90 / 7516 MBF = $26.13/MBF

(5.2H) Decommissioning	$6,008.30

(5.2H) Cost/MBF $6,008.30/7516 MBF = $0.80/MBF

(2.1-5.2H) Cost ($57,126.16 + $139,231.74 + $6,008.30) = $202,366.20

Total Cost/MBF (Excluding Road Use) $202,366.20/7516 MBF = $26.92/MBF

1) Road Use Fees - Amortization

Details

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

Subtotal by agreement number

(1.1) Subtotal $0.00

2) BLM Maintenance - Timber Haul

			MAINTENANCE (2.1)				ROCKWEAR (2.2)		
Road Number and Segment	A N	Surf Type	Maint Mi	x Fee x	Vol MBF	= Maint Fee x MBF =			Rkwear
35-7-11.00 A-C2A		BST	6.05	0.82	2220	$11,013.42	0.00	2220	$0.00
35-7-4.0	A	BST	0.37	0.82	3232	$980.59	0.00	3232	$0.00
34-8-36.0 A1	A	BST	0.73	0.82	3232	$1,934.68	0.00	3232	$0.00
35-8-2.0 A1-B	A	BST	4.25	0.82	3232	$11,263.52	0.00	3232	$0.00
35-8-2.0 C	A	BST	2.25	0.82	1572	$2,900.34	0.00	1572	$0.00
34-8-27.0 A	A	BST	0.88	0.82	423	$305.24	0.00	423	$0.00
34-8-28.0 A	A	BST	0.33	0.82	423	$114.46	0.00	423	$0.00
34-8-34.00 B	A	BST	1.10	0.82	210	$189.42	0.00	210	$0.00
34-8-34.00 A	A	BST	0.65	0.82	845	$450.39	0.00	845	$0.00
34-8-34.00 A	A	BST	1.20	0.82	1237	$1,217.21	0.00	1237	$0.00
34-8-34.00 A	A	BST	1.09	0.82	1509	$1,348.74	0.00	1509	$0.00
34-8-34.00 A	A	BST	1.22	0.82	1660	$1,660.66	0.00	1660	$0.00

(2.1) Subtotal $33,378.67 (2.2) Subtotal $0.00

3) Third Party Maintenance and Rockwear

			MAINTENANCE (3.1)					ROCKWEAR (3.2)	
Agrmnt Number	Surface Type	Road Number	Mi	x	Fee	x MBF =	Maint Fee x MBF	=	Rkwear
M-2000	AGG	34-7-21.6 A	1.00				$0.85 x 1244	=	$1,057.40
M-2000	AGG	35-7-11.0 E	1.10				$0.85 x 926	=	$865.81
M-2000	NAT	34-7-36.0 L	1.62				$0.00 x 926	=	$0.00

Subtotal of maintenance fees by agreement number:

Subtotal of rockwear fees by agreement number:

M-2000 1,923.21

(3.1) Subtotal $0.00

(3.2) Subtotal $1,923.21

4) Other Maintenance Payments - USFS or Others Perform Maintenance

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

(4.1) Subtotal $0.00

5) Purchaser Maintenance - Rock Wear

-11.0 E & -21.6 A as NAT for fee purposes - both are AGG

TIMBER HAUL (5.1)

Road No and Segment	A N	Mi	RkWear x Fee x	Vol MBF =	Total RkWear

34-7-02.00 A	A	0.58 x $0.85 x 2064 =	$1,017.55
34-7-03.00 A1A2	A	2.07 x $0.85 x 2064 =	$3,631.61
34-7-03.01 A-D	A	4.40 x $0.85 x 2064 =	$7,719.36
34-7-03.01 E	A	1.26 x $0.85 x 1641 =	$1,757.51
34-7-03.01 E-F	A	0.66 x $0.85 x 1479 =	$829.72
34-7-03.01 F	A	1.50 x $0.85 x 1389 =	$1,770.98
34-7-07.02 A	A	0.11 x $0.00 x 162 =	$0.00
34-7-05.01	A	1.89 x $0.85 x 211 =	$338.97
34-7-05.02	A	0.95 x $0.85 x 212 =	$171.19
34-7-36.00 O	N	0.95 x $0.00 x 230 =	$0.00
34-7-36.00 N-O	N	1.10 x $0.00 x 290 =	$0.00
34-7-36.00 M	N	0.60 x $0.00 x 926 =	$0.00
34-7-36.00 L	N	1.62 x $0.00 x 926 =	$0.00
34-7-36.00 K	A	0.51 x $0.85 x 926 =	$401.42
34-7-15.04	A	0.10 x $0.85 x 926 =	$78.71
35-7-11.00 F	A	0.69 x $0.85 x 926 =	$543.10
35-7-11.00 E	N	1.10 x $0.00 x 926 =	$0.00
34-7-29.02	N	0.45 x $0.00 x 50 =	$0.00
34-7-29.02	N	1.30 x $0.00 x 1062 =	$0.00
34-7-29.02	N	0.33 x $0.00 x 1103 =	$0.00
34-7-21.06 B-C	N	1.11 x $0.85 x 141 =	$133.03
34-7-21.06 B	N	0.75 x $0.85 x 1244 =	$793.05
34-7-21.06 A	N	1.00 x $0.00 x 1244 =	$0.00
34-7-22.00 A-B	N	0.29 x $0.85 x 1244 =	$306.65
35-7-11.00 C3	A	0.80 x $0.85 x 2220 =	$1,509.60
34-8-22.01 C	A	0.30 x $0.00 x 121 =	$0.00
34-8-22.01 B	A	0.79 x $0.85 x 121 =	$81.25
34-8-28.00 B	A	0.66 x $0.85 x 121 =	$67.88
34-8-28.00 B	A	0.59 x $0.85 x 423 =	$212.13
34-8-21.00 A	A	0.14 x $0.85 x 120 =	$14.28
34-8-21.00 B	A	0.14 x $0.00 x 30 =	$0.00
34-8-21.03	A	0.13 x $0.85 x 30 =	$3.32
34-8-22.03	A	0.56 x $0.00 x 182 =	$0.00
35-8-02.00 E	A	0.82 x $0.00 x 182 =	$0.00
35-8-02.00 D-E	A	0.29 x $0.00 x 773 =	$0.00
35-8-02.00 D	A	0.96 x $0.00 x 1149 =	$0.00
34-8-27.01	A	0.66 x $0.00 x 376 =	$0.00
34-8-15.00 A	A	0.15 x $0.85 x 30 =	$3.83
34-8-15.00 A	A	0.48 x $0.85 x 90 =	$36.72
34-8-15.00 A	A	0.48 x $0.85 x 635 =	$259.08
34-8-22.02	A	0.62 x $0.85 x 272 =	$143.34

(5.1) Subtotal $21,824.28

Purchaser Operational Maintenance

Move In

Equipment	No Units	Move x	Cost/ in x	Dist 50 Mi x	Sub-Factor =	total
Motor Grader:	1	6		536	1.00	$3,216.00
Back Hoe:	1	6		399	1.00	$2,394.00
Loader:				536	0.63	$0.00
Water Truck:	1	6		131	1.00	$786.00
Dump Truck:	1	6		124	1.00	$744.00
Excavator:				536	0.63	$0.00
Roller:	1	6		536	1.00	$3,216.00

(5.2A) Total $10,356.00

Culvert Maintenance - Including Catch basins and Downpipes

Miles	x	Cost/Mi	=	Subtotal
32.32		$501.63		$16,212.68

(5.2B) Total $16,212.68

Grading (Includes Ditches and Shoulders)

Miles	x	Cost/Mi	x	Freq	=	Subtotal
Blade w/ Ditch:	32.32		923.61	1		$29,851.08
Blade w/o Ditch:	8.78		559.44	1		$4,911.88

(5.2C) Total $34,762.96

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

Type Equipment	No Slides /Slumps	x	Hours Each	x	Equip Cost	= Subtotal
Grader:	0		0		$184.36	$0.00
Loader:	0		0		$114.30	$0.00
Backhoe:	0		0		$108.79	$0.00

(5.2D) Total $0.00

Dust Palliative (Water)

Spreading Hours

	No Miles	/	Freq MPH	=	Truck Hours	x	Days	x	/Day	=	Hours
	4.23		1		4.2		30		1		126
Load & Haul =					1.0		30		2		60
Return trip =					1.0		30		2		60
Total Hours =					246						

Truck Cost: $109.35/Hr. x 246.0 Hours = $26,900.10

(5.2E) Total $26,900.10

Surface Repair (Aggregate)

Quarry / Source Name: Robco 1.5" minus

Production Cost:	750.0 CY x $18.50/CY		= 13,875.00
Haul to Stockpile:			
Grades > 15%	750.0 CY x (($2.43/CY x 8.00 Mi)	+ $1.62)	= 15,795.00
Grades <= 15%	750.0 CY x (($1.21/CY x 12.00 Mi)	+ $1.62)	= 12,105.00
State / Co Roads	750.0 CY x (($0.54/CY x 15.00 Mi)	+ $1.62)	= $7,290.00
Process with Grader:	750.0 CY x $1.20/CY		= $900.00
Compaction:	750.0 CY x $1.38/CY		= $1,035.00
		SubTotal	$51,000.00

(5.2F) Total $51,000.00

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

Road Number	Cubic Yds Pullback Material		Qty Waterbars		Qty Earthen Barriers	= Total
TR 07-04	(0x2.19)	+	(5x86.27)	+	(1x258.81)	= $690.16
TR 15-02-A	(0x2.19)	+	(4x86.27)	+	(1x258.81)	= $603.89
TR 15-02-B	(0x2.19)	+	(8x86.27)	+	(1x258.81)	= $948.97
TR 22-01	(0x2.19)	+	(3x86.27)	+	(1x258.81)	= $517.62
35-8-02.00 D-E	(0x2.19)	+	(26x86.27)	+	(0x258.81)	= $2,243.02

(Other Cost) Total $5,003.66

Time & Equipment

TR 07-04 Excavator -Small (1.5 CY) - Camouflaging: 2 hr @ $125.58/hr =$251.16

TR 15-02-A Excavator -Small (1.5 CY) - Camouflaging: 2 hr @ $125.58/hr =$251.16

TR 15-02-B Excavator -Small (1.5 CY) - Camouflaging: 2 hr @ $125.58/hr =$251.16

TR 22-01 Excavator -Small (1.5 CY) - Camouflaging: 2 hr @ $125.58/hr =$251.16

(5.2H) Decommissioning Total $6,008.30

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

EXHIBIT D1

RUM CREEK HAZARD T.S.
TRACT NO. ORM070.TS.2023.0011

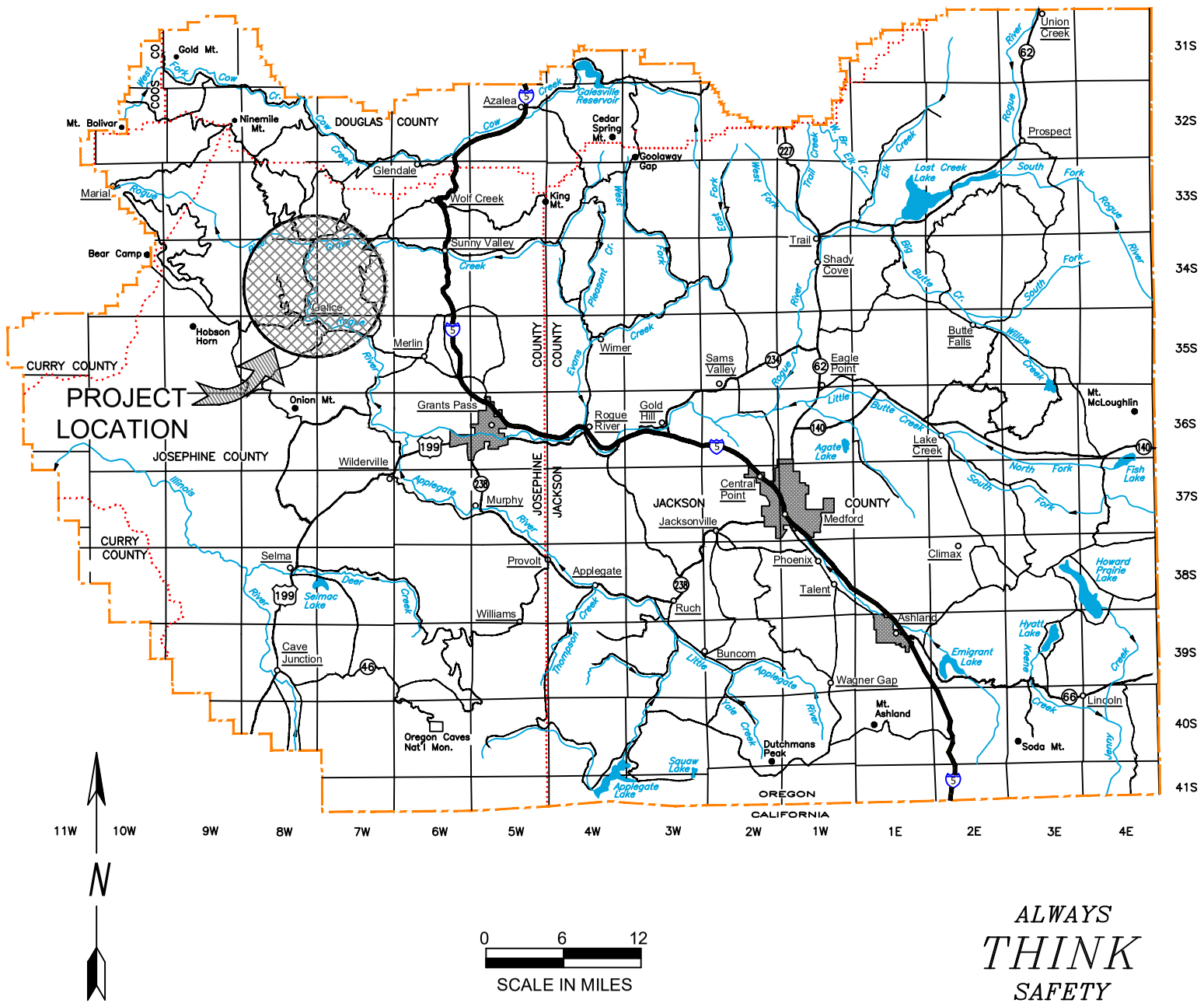

Exhibit No.	Description
D-1	TITLE SHEET
D-2	ROAD MAINTENANCE SPECIFICATIONS
D-3	ROAD MAINTENANCE MAPS
D-4	ROAD DECOMMISSIONING WORKLIST
D-5	ROAD DECOMMISSIONING MAPS
D-6	ESTIMATE OF QUANTITIES
D-7	BARRICADE AND WATER BAR DETAILS
D-8	DECOMPACTION & CULVERT REMOVAL DETAILS
D-9	TYPICAL ROAD CAMOUFLAGE DETAIL

ALWAYS
THINK
SAFETY

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

RUM CREEK HAZARD TIMBER SALE COVER SHEET

DRAFTED BY: BLM	SCALE: 1" = 12 MI
DATE: MAY 2023	SHEET: 1 OF 1

ROAD MAINTENANCE SPECIFICATIONS

TABLE OF CONTENTS

GENERAL - 3000

3001 - The Purchaser shall be required to maintain all roads as shown on Exhibit D3, Exhibit D5 maps, and Exhibit D6 of this contract in accordance with Sections 3000, 3100, 3200, 3300, 3400, and 3500 of this exhibit.

3001a - The Purchaser shall be required to provide maintenance on roads in accordance with Subsections 3403, 3404, 3405, and 3406.

3002 - The Purchaser shall maintain the cross section of existing dirt or graveled roads to the existing geometric standards. Any roads required to be constructed, improved, or renovated under terms of this contract shall be maintained to the geometric standards required in Exhibit C of this contract.

3003 - The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.

3004 - The Purchaser shall be responsible for providing timely maintenance and cleanup on any 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.

3102 - The Purchaser shall furnish and place **750 cu. yds. of aggregate** conforming to the requirements in Section 1200 of Exhibit C of this contract on the roadway at locations and in the amounts designated by the Authorized Officer.

This aggregate shall be used to repair surface failures and areas of depleted surface depth excluding damages covered by Section 12 of this contract. The aggregate shall be furnished, hauled, placed, spread, and compacted by use of dump trucks, water trucks, and motor grader or similar equipment.

3103 - The purchaser shall maintain established berms and place additional berms using adjacent material where needed to protect fills as directed by the Authorized Officer.

3104 - The purchaser shall perform other road cleanup including removal of debris, fallen timber, bank slough, and slides which can practicably be accomplished by a motor 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.

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 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 C6.

3108 - The Purchaser shall avoid fouling gravel or bituminous surfaces through covering with earth and debris from side ditches, slides or other sources. The Purchaser shall also avoid blading surfacing material off the running surface of the roadway.

Skidding of logs on the roadway in or outside designated logging units is not authorized without prior written approval by the Authorized Officer. Repair required 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 and/or bituminous roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. Repair of the roads 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 15 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 Sec. 16(b) of this contract. This work shall include any maintenance and/or damage repairs specified in Sections 3000, 3100, and 3200 necessary to meet the conditions specified in Subsection 3002 and shall be executed in accordance with Subsection 3302 of this section.

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

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

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

OTHER MAINTENANCE - 3400

3401 - The Purchaser shall repair any damage to road surfaces that was specified under 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 shall be required to furnish and apply non-saline water during dry hauling periods, when directed by the Authorized Officer, for the purpose of laying dust and to prevent loss of surface material. The first application of water shall be made at the rate of one- half gallon per yd^2 of road surface traveled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds^3 of rock hauled. Subsequent watering may be done at a rate less than one-half gallon per yd^2 when a specified lesser rate is approved by the Authorized Officer.

The following roads shall be watered:

Road Number	From M.P.	to M.P.
34-7-2.0 A-B	0.00	2.16
34-7-3.0 A1-A2	0.00	2.07

The Purchaser shall secure any necessary water permits and pay all required water fees for use of the water source(s) selected by the Purchaser and approved by the Authorized Officer.

During drought periods when the transportation of water from the source to the roads noted above exceeds 15 miles, a reduction shall be made in the total purchase price to reflect the additional haul or the substitution of other acceptable dust palliatives in lieu of watering based on equipment rental rates from the current BLM Road Cost Guide.

3404 - The Purchaser may at his option and expense substitute lignin sulfonate for water on any or all road segments listed in Subsection 3403 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.

3405 - **IF PURCHASER ELECTS TO USE**, The Purchaser shall be required to furnish and apply lignin sulfonate dust palliatives in accordance with these specifications.

This work shall be performed upon acceptance of the required road construction, renovation, or improvement work and be placed prior to any rock and timber hauling other than right-of-way timber.

When timber hauling has commenced during the wet weather season, the Purchaser shall apply the required dust palliative during the subsequent summer hauling season as directed by the Authorized Officer.

Other means of dust abatement needed prior to the application of the required dust palliative shall be applied as approved by Authorized Officer.

The specified dust palliative shall be applied evenly over the specified road surface width of the following roads:

Road No.	From M.P.	to M.P.	Spread Width
34-7-2.0 A-B	0.00	2.16	15’
34-7-3.0 A1-A2	0.00	2.07	15’

Turnouts and extra widening shall be included in addition to the spread width.

3405b - The Purchaser shall notify affected residents along the roads to be treated of the planned application of lignin sulfonate dust palliatives at least 7 days prior to the work. Warning signs shall be posted at key intersections to alert users that the road is being treated. All signs shall be removed by the Purchaser within 30 days of treatment.

3406 - Prior to the application of lignin sulfonate dust palliatives, the roadbed shall be bladed and shaped to remove surface irregularities and excess loose material. The prepared surface must have 1/2 to 1 inch of relatively loose material and be visibly moist and drying.

3406b - A light application of water to promote penetration shall be made in advance of the 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 dust palliatives 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 degrees 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 7 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 palliatives 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 specified under Subsection 3405, a lignin sulfonate dust palliative conforming to the material requirements of Subsection 3412b. The rate of application shall be 0.5 gallons per yd^2 surface. A second application at the rate of 0.3 gallons per yd^2 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
cadium	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 work may include ripping, installing water bars, 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 existing roads in accordance with these specifications, and as shown on the plans at the following locations:

Road No or Site	From Sta/MP	To Sta/MP	Decommission
TR 15-02-A	0+00	6+40	Decommission
TR 15-02-B	0+00	8+15	Decommission
TR 22-01	0+00	4+50	Decommission
TR 07-04	0+00	7+70	Decommission

3504 - Decommissioning work shall be completed after road use. All decommissioning work shall be performed during the following seasonal periods to address soil moisture:

From: September 1	To: October 15 (of the same year)

3505 - Where draw crossing fill material is to be excavated and removed, the finished bottom of draw profile shall be re-established to its original channel grade and resulting adjacent banks shall be constructed to a 2:1 backslope ratio.

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 on cut and fill slopes as well as the decommissioned road bed. The operation shall produce a dense, uniform mat. All slash stockpiles created by the purchaser shall be utilized for Camouflaging and Full Decommission.

3507 - Culverts not designated as salvage by the Authorized Officer for the Government shall become the property of the Purchaser. The Purchaser shall be responsible for disposal of materials in a legal manner and for payment of any fees required. Sale of material on site is not allowed unless authorized in writing by the Authorized Officer.

3508 - Protect areas with camouflaging and soil stabilization from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.

3509 - Access shall be blocked with barricades as shown on the Barricade and Water Bar Detail Exhibit C-7, Decompaction and Culvert Removal Detail Sheet Exhibit D-8, Typical Road Camouflage Sheet Exhibit D-9, and at locations as shown on Exhibits D-4 and D-5.

3510 - Sections of roadway where ripping and/or is required shall be cleared of all vegetation and slash. The resultant slash shall be stockpiled in a manner that will allow retrieval and uniform spreading in accordance with Subsection 3506. No vegetation or slash shall be mixed with excavated material to be placed.

3511 - Ripping and/or subsoiling and water barring shall be done on designated roadways. Ripping shall be performed with wing-toothed rippers or excavators modified for tillage.

3512 - Draw crossing fill material shall be excavated and placed in designated locations for use in accomplishing partial recontouring. Placement of materials shall produce well-drained, uniform recontoured terrain as shown on the plans. The finished draw excavation shall meet requirements of Subsection 3505.

3513 - Water bars shall be installed across full width of roadway at spacing shown in the specifications. Water bars shall be constructed conforming to the lines, grades, dimensions and typical details as shown on Exhibit D-7. No water bar will be installed closer than 50 feet to a draw crossing.

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 Subsection 3506 on designated roadways, disturbed areas, landings, and other areas disturbed by the purchaser's operations in accordance with these specifications and as shown in the plans.

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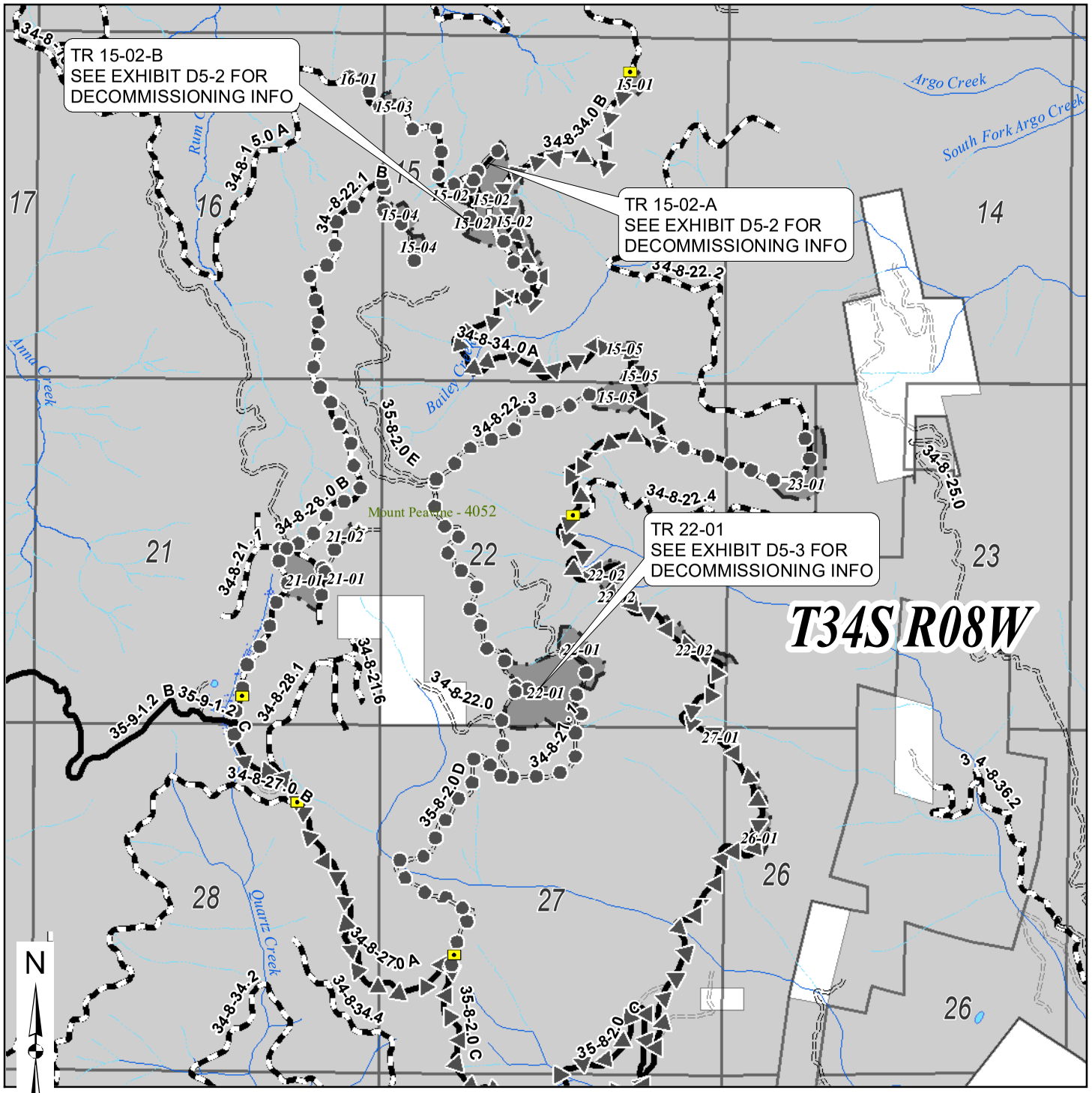

EXHIBIT D3-1

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Maintenance Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD MAINTENANCE PEAVINE/RUM CREEK MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 1 OF 7

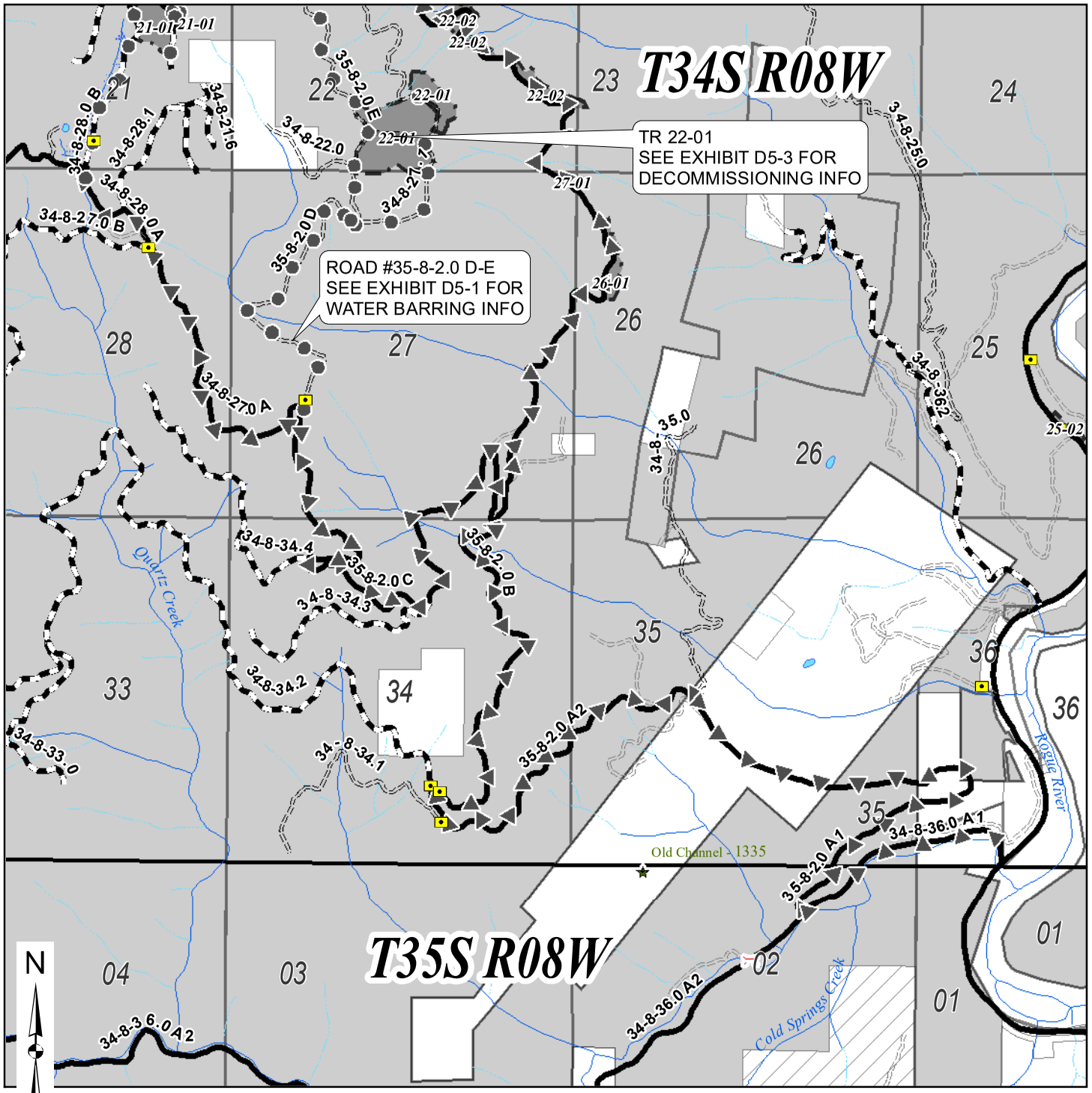

EXHIBIT D3-2

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Maintenance Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD MAINTENANCE PEAVINE/RUM CREEK MAP

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DATE: MAY 2023	SHEET: 2 OF 7

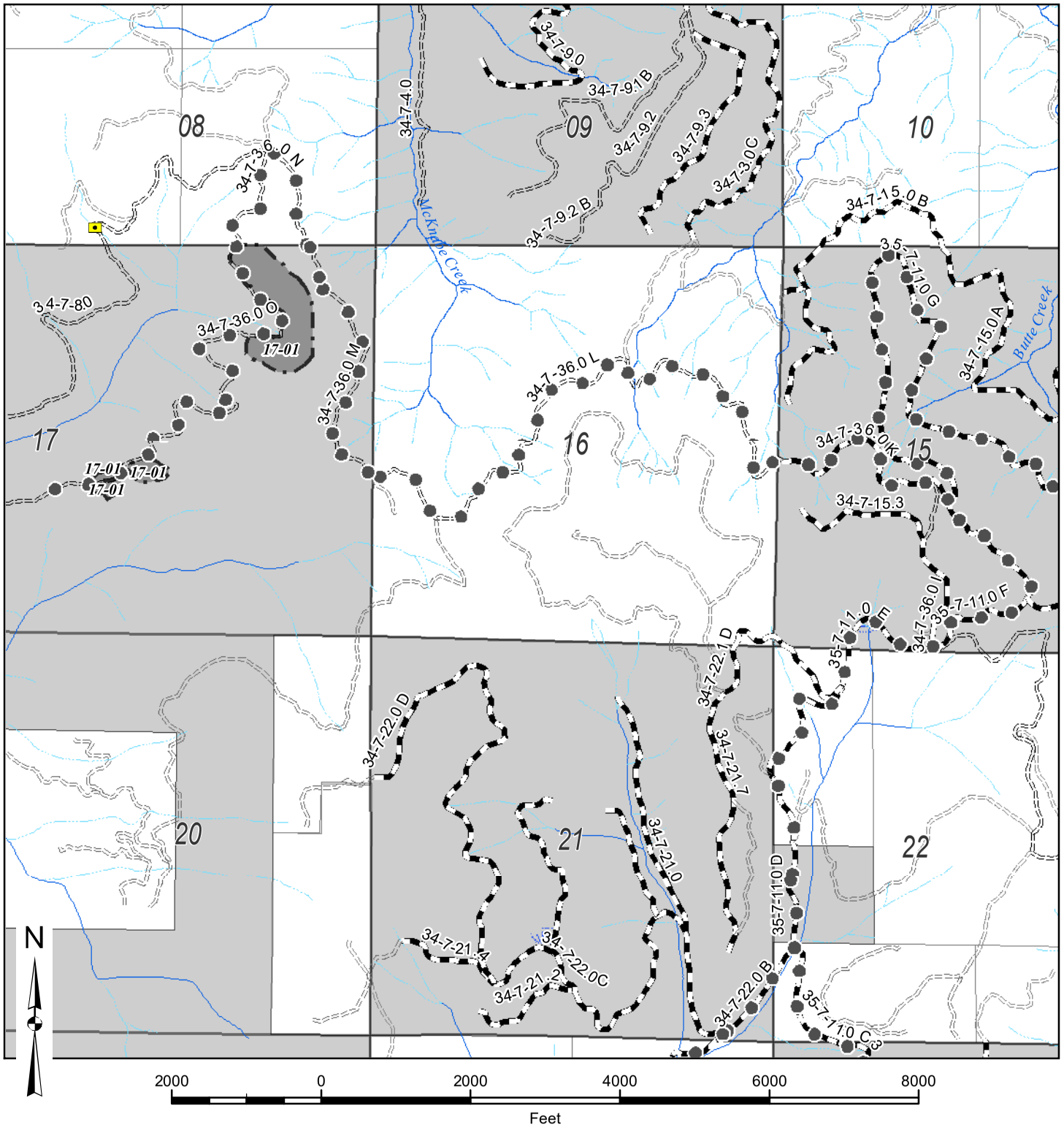

EXHIBIT D3-3

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Maintenance Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD MAINTENANCE HOG CREEK/ANGORA MAP

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DATE: MAY 2023	SHEET: 3 OF 7

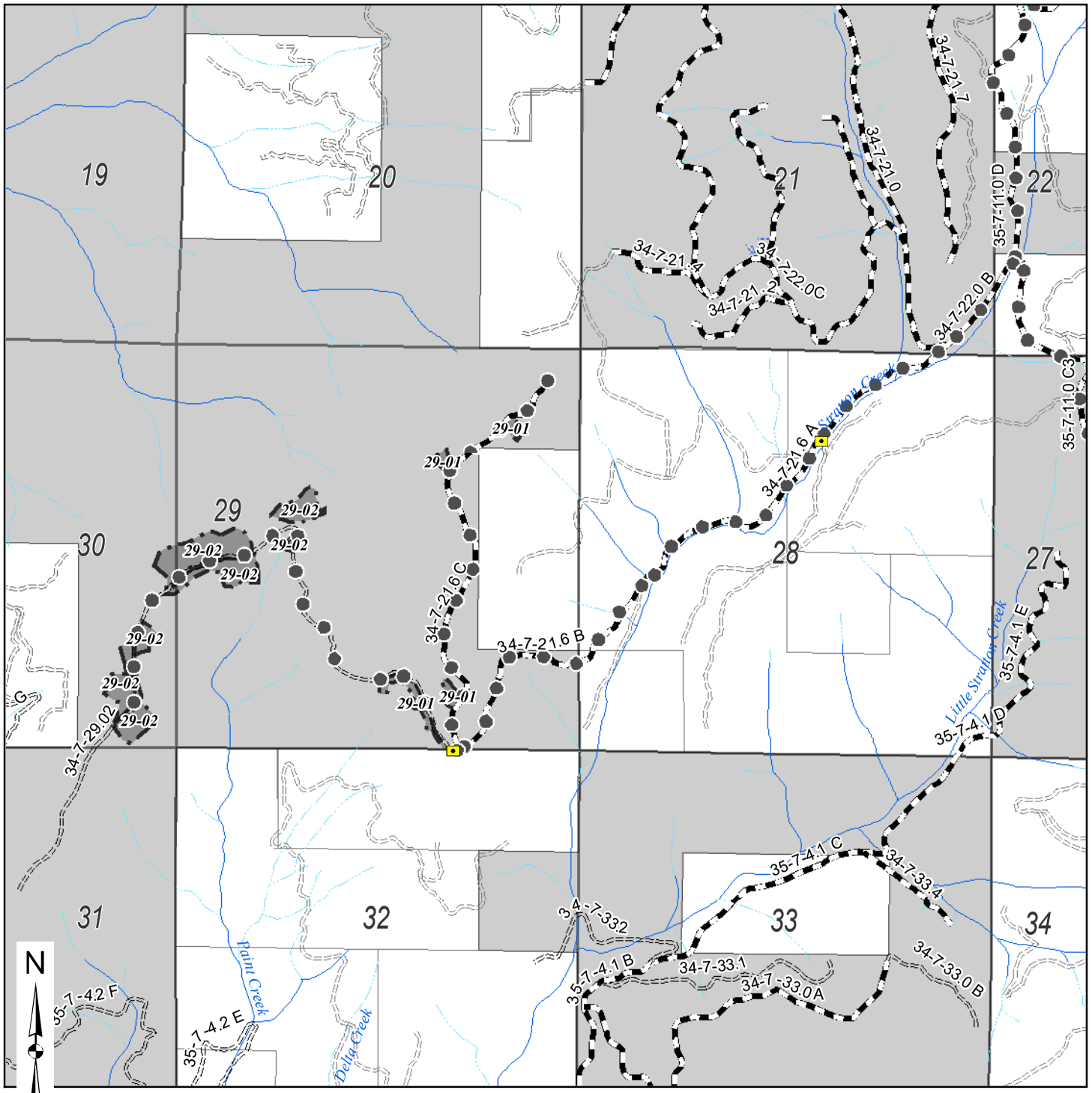

EXHIBIT D3-4

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Maintenance Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD MAINTENANCE HOG CREEK/ANGORA MAP

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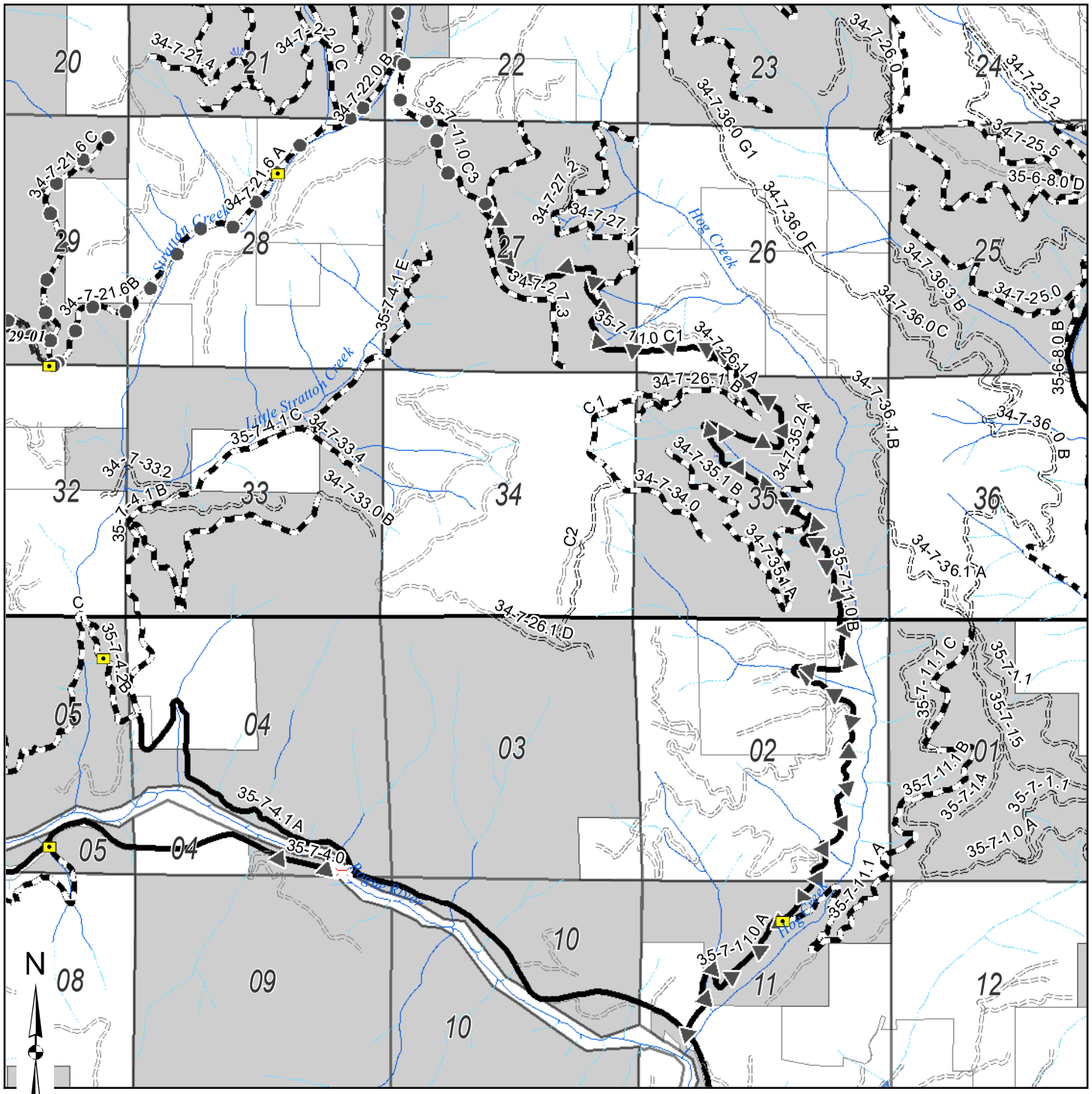

EXHIBIT D3-5

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Maintenance Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD MAINTENANCE HOG CREEK/ANGORA MAP

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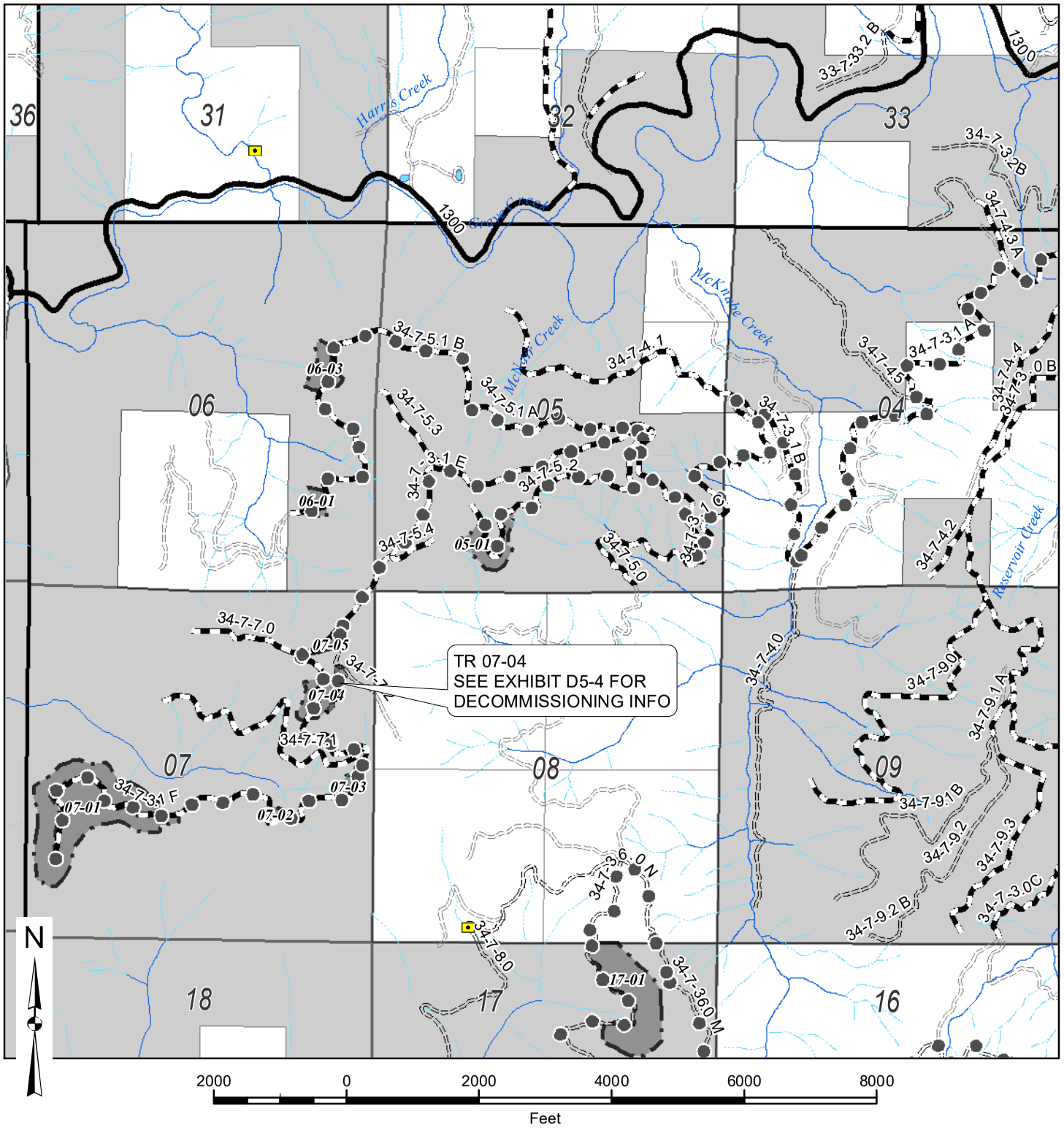

EXHIBIT D3-6

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Maintenance Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD MAINTENANCE ANGORA/MCKNABE MAP

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DATE: MAY 2023	SHEET: 6 OF 7

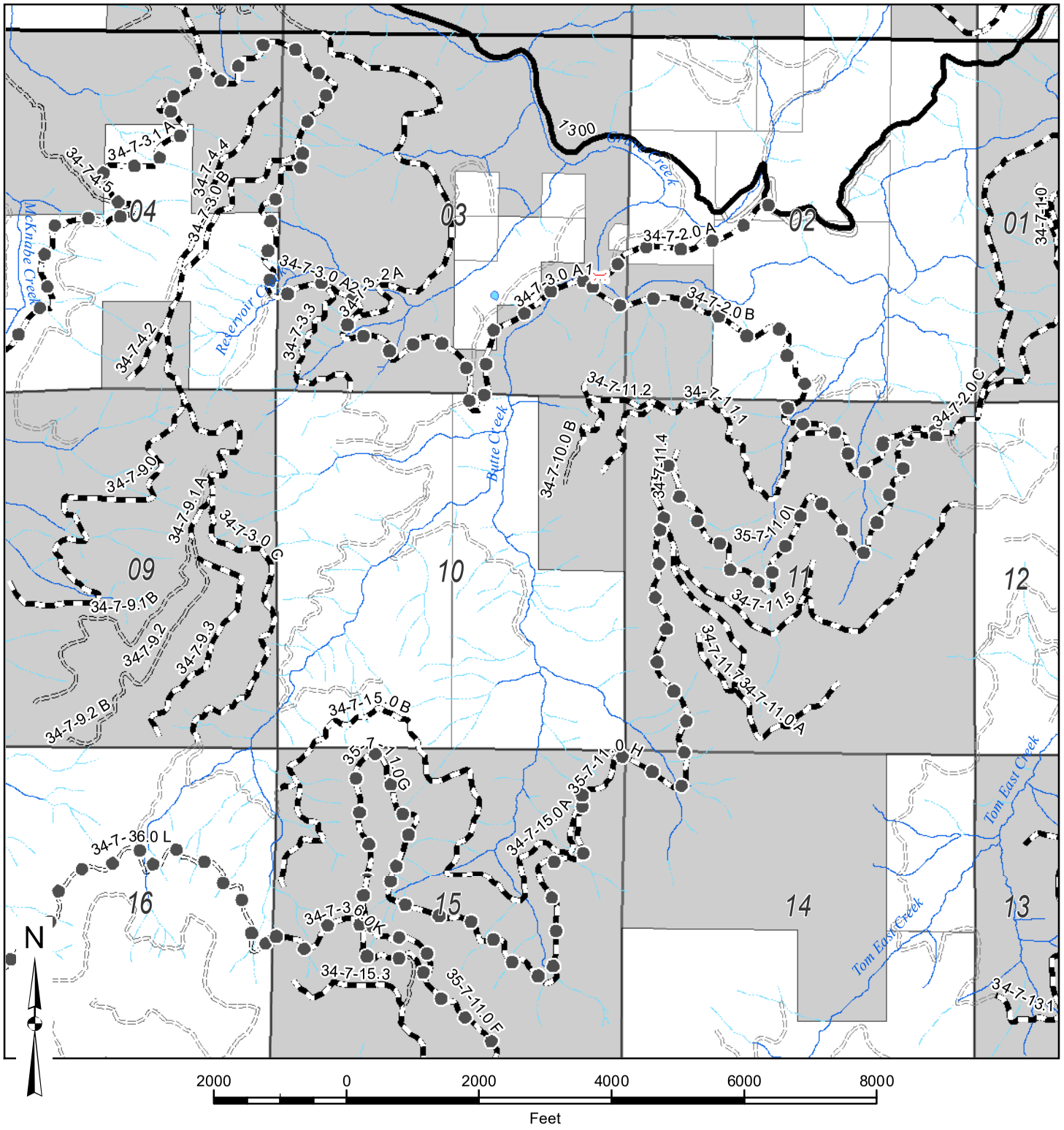

EXHIBIT D3-7

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Maintenance Responsibility

- BLM
- Purchaser

Temporary Roads

- Temp Construction
- Temp Reconstruction
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE ROAD MAINTENANCE ANGORA/MCKNABE MAP

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DATE: MAY 2023	SHEET: 7 OF 7

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Roads Decommissioning Work List

Definitions:

AGG = Aggregate	CY = Cubic Yard
NAT = Natural/Native Surface	BST = Bituminous
Jct = Junction/Intersection	Pvt = Private (Industry, Citizen)
CMP = Corrugated Metal Pipe	MP = Mile Post
Seg = Segment	STA = Station

Full Decommission = Full Decommissioning shall include removing temporary culverts, installing water bars per the Water Bar Spacing by Erosion Class Table shown in Exhibit D7, and unless otherwise noted in the work list, and camouflaging and barricading road entrances. All disturbed soils shall be covered with slash. If enough slash is not available, then remaining disturbed areas shall be mulched with weed-free straw. Camouflaged entrances shall consist of logs, slash, boulders and other debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use per Exhibit D9.

Long Term Closure = Long Term Closure shall include installing water bars per the Water Bar Spacing by Erosion Class Table shown in Exhibit D7, stabilizing or removing fills on unstable areas, barricading the road entrance, camouflaging the road entrance, and removing culverts (armor if needed). All disturbed soils shall be covered with slash. If enough slash is not available, then remaining disturbed areas shall be mulched with weed-free straw. Camouflaged entrances shall consist of logs, slash, boulders and other debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use per Exhibit D9.

Camouflaging = Camouflaged entrances shall consist of logs, slash, boulders and other debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use. Detail in Exhibit D9.

Culvert Removal = When removing culverts unless constructing armored water dips, pull slopes back to the natural slope, or at least 2:1, to minimize sloughing, erosion, and the potential for the stream to undercut stream banks during periods of high stream flows. Remove excess sediment from stream channels during culvert removal, replacement, and installation activities.

Barricade = Barricade only.

35-8-2.0 Road, Seg D-E – Peavine Road – NAT – Sub: 14Ft – Ditch: 3/0Ft

MP	Description
6.50	Jct. w/ 35-8-2.0 Road on right and 34-8-27.0 Road on left (BST portion). Begin reconstructing existing water bars.
6.53	Existing gate.
6.64	Reconstruct existing water bar.
6.69	Reconstruct existing water bar.
6.72	Reconstruct existing water bar.
6.73	Reconstruct existing water bar.
6.76	Reconstruct existing water bar.
6.82	Reconstruct existing water bar.

6.86	Reconstruct existing water bar.
6.91	Reconstruct existing water bar.
6.97	Reconstruct existing water bar.
7.01	Reconstruct existing water bar.
7.04	Reconstruct existing water bar.
7.06	Reconstruct existing water bar.
7.09	Reconstruct existing water bar.
7.15	Reconstruct existing water bar.
7.18	Reconstruct existing water bar.
7.26	Reconstruct existing water bar.
7.30	Reconstruct existing water bar.
7.35	Reconstruct existing water bar.
7.41	Reconstruct existing water bar.
7.43	Reconstruct existing water bar.
7.45	Reconstruct existing water bar.
7.46	Jct. w/ 34-8-27.1 Road on right.
7.48	Reconstruct existing water bar.
7.54	Reconstruct existing water bar.
7.56	Reconstruct existing water bar.
7.59	Reconstruct existing water bar.
7.62	Unit 22-01 boundary on right.
7.63	Reconstruct existing water bar.
7.64	Jct. w/ 34-8-22.0 Road on left. End reconstructing water bars.

TR 15-02-A – NAT – Sub: 14Ft – Ditch: 0Ft – X-Sect: Outsloped

STA	Description
0+00	Jct. w/ 34-8-15.0 road. Upon completion of log haul, begin full decommissioning and entrance camouflage. See Exhibit D5-1 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
0+50	Construct earthen barricade.
6+40	End full decommissioning.

TR 15-02-B – NAT – Sub: 14Ft – Ditch: 0Ft – X-Sect: Outsloped

STA	Description
0+00	Jct. w/ 34-8-15.0 road. Upon completion of log haul, begin full decommissioning. See Exhibit D5-4 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
0+50	Construct earthen barricade.
8+15	End full decommissioning.

TR 22-01 – NAT – Sub: 14Ft – Ditch: 0Ft – X-Sect: Outsloped

STA	Description
0+00	Jct. w/ 35-8-2.0 road. Upon completion of log haul, begin full decommissioning and entrance camouflage. See Exhibit D5-6 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
0+50	Construct earthen barricade.
4+50	End full decommissioning.

TR 07-04 – NAT – Sub: 14Ft – Ditch: 0Ft – X-Sect: Outsloped

STA	Description
0+00	Jct. w/ 34-7-7.2 road. Upon completion of log haul, begin full decommissioning and entrance camouflage. See Exhibit D5-7 for map, Exhibit D7 for barricade and water bar construction specifications, and Exhibit D9 for road camouflaging.
0+50	Construct earthen barricade.
7+70	End full decommissioning.

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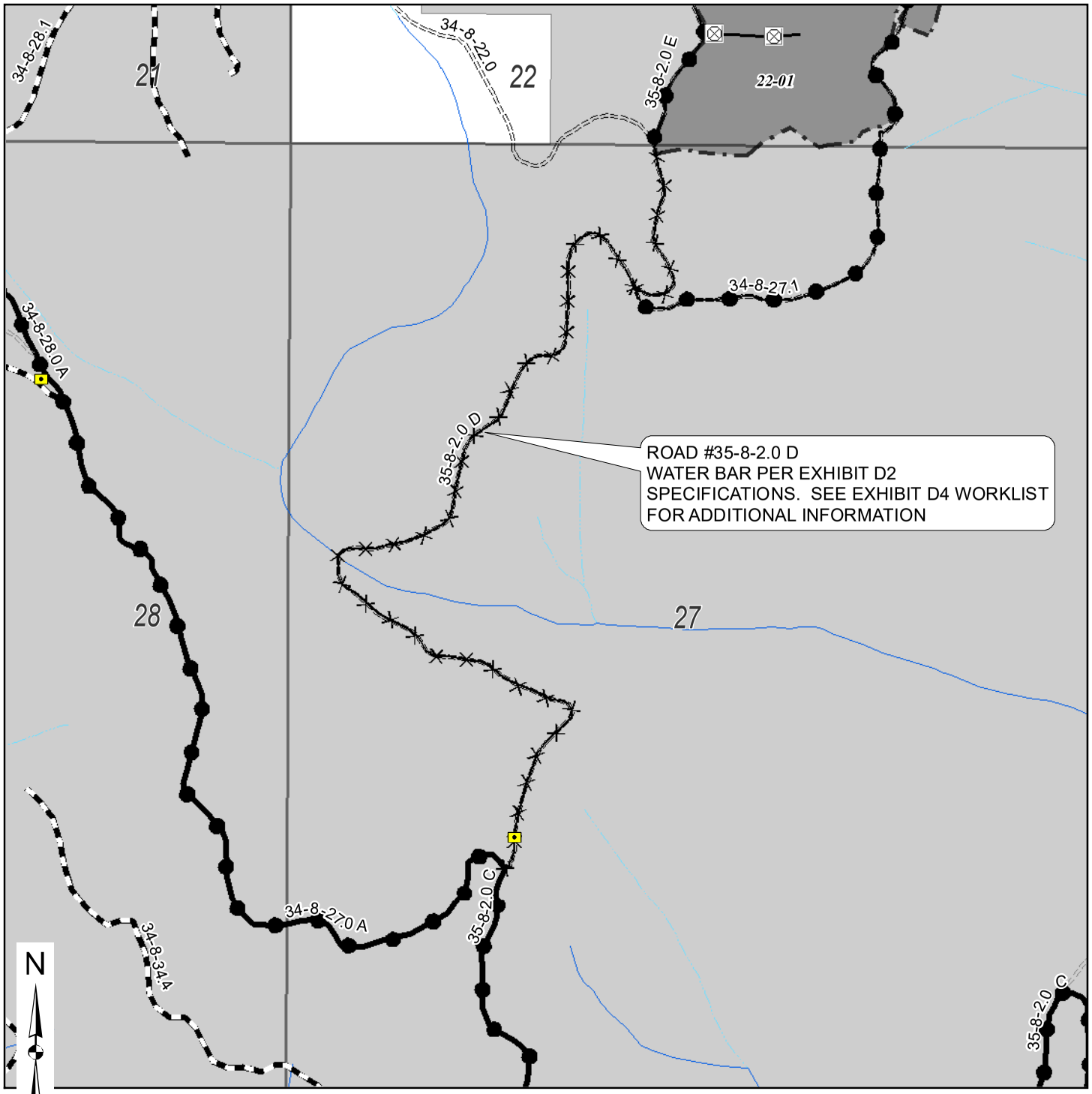

EXHIBIT D5-1

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Decommissioning Responsibility

- Remaining Haul Route
- Full Decommission
- Water Bar
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE
ROAD # 35-8-2.0 D-E
WATER BAR MAP

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DATE: MAY 2023	SHEET: 1 OF 4

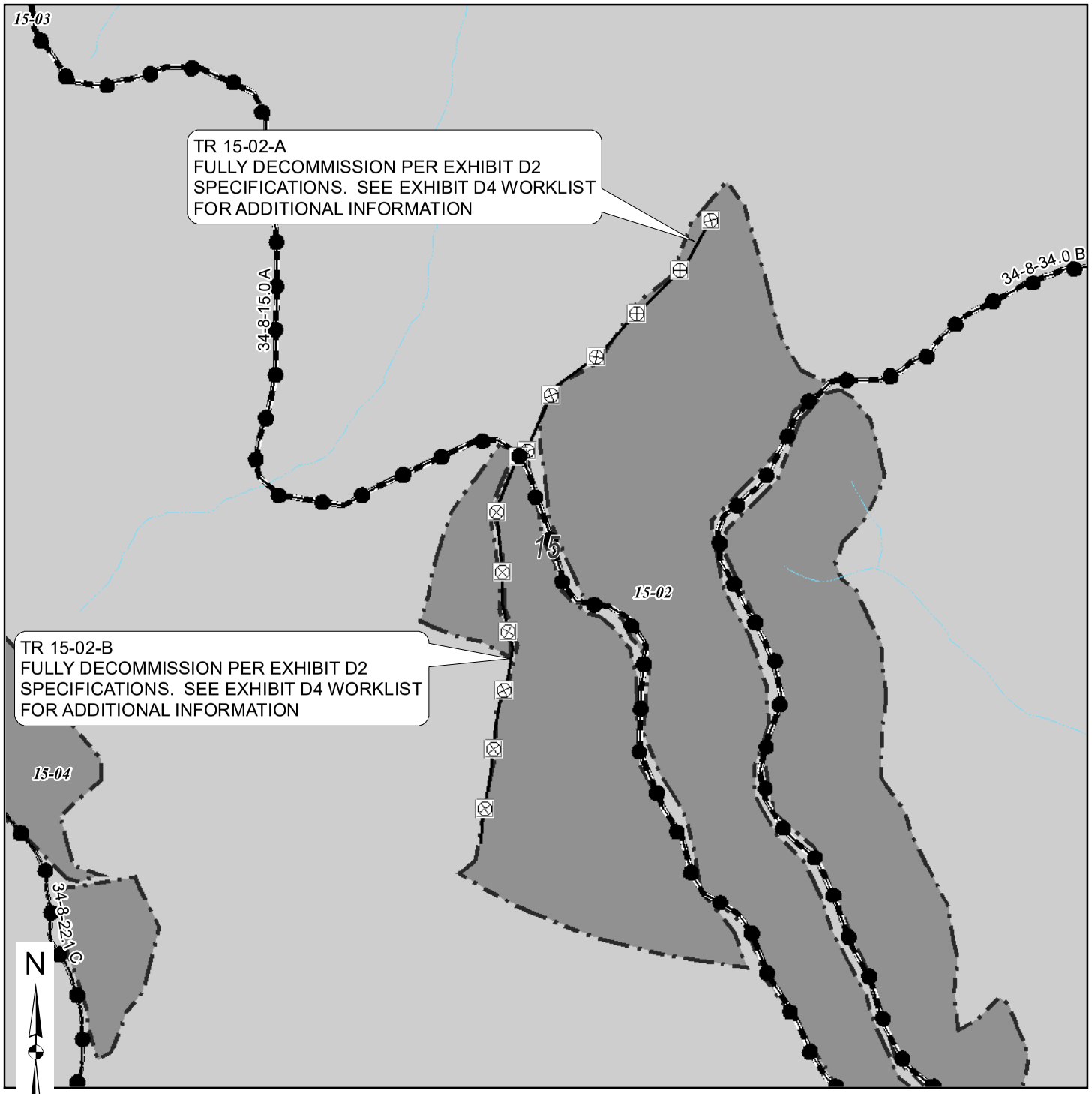

EXHIBIT D5-2

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Decommissioning Responsibility

- Remaining Haul Route
- Full Decommission
- Water Bar
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE
TR 15-02-A & TR 15-02-B
DECOMMISSIONING MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 2 OF 4

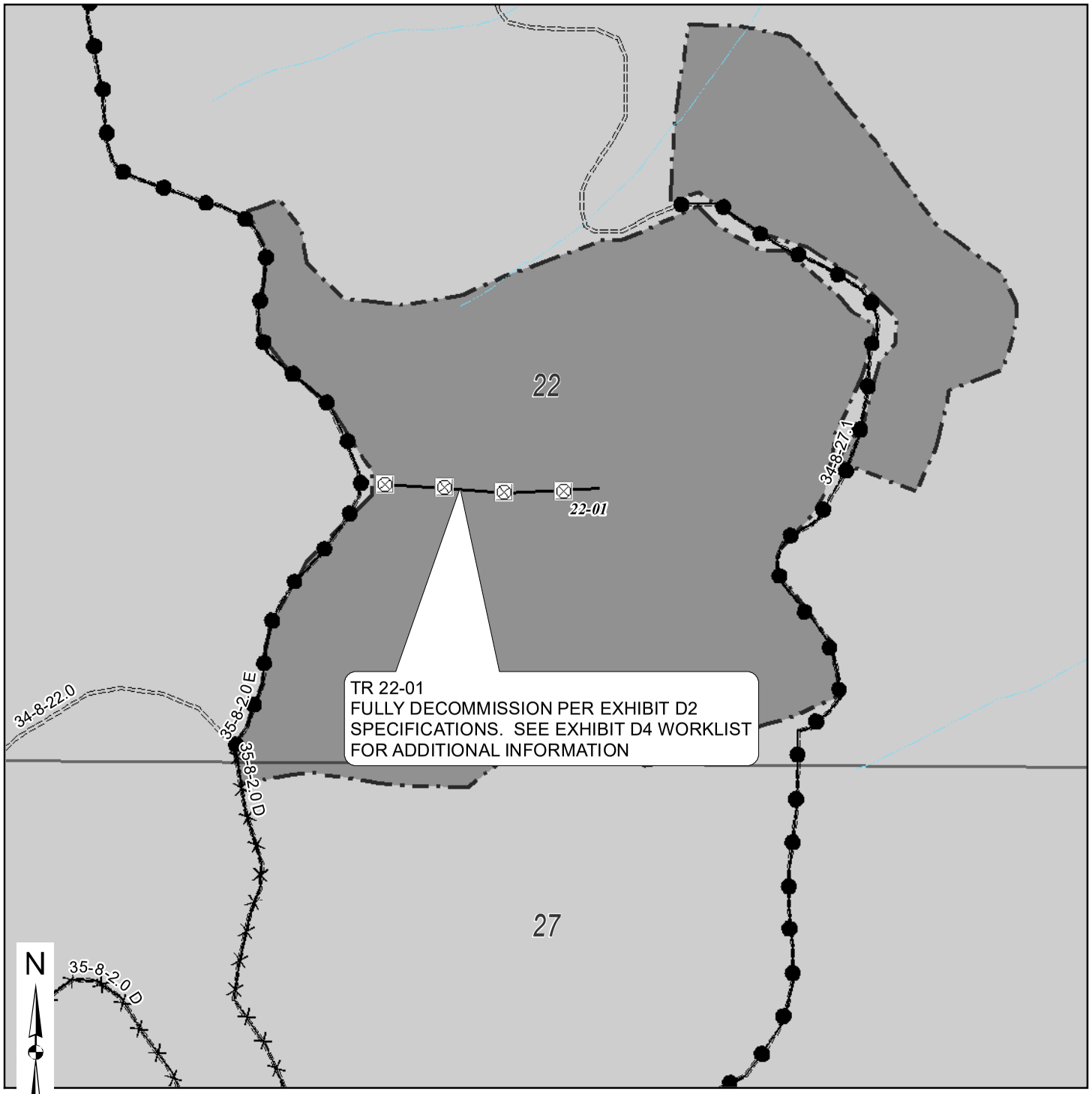

EXHIBIT D5-3

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Decommissioning Responsibility

- Remaining Haul Route
- Full Decommission
- Water Bar
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE TR 22-01 DECOMMISSIONING MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 3 OF 4

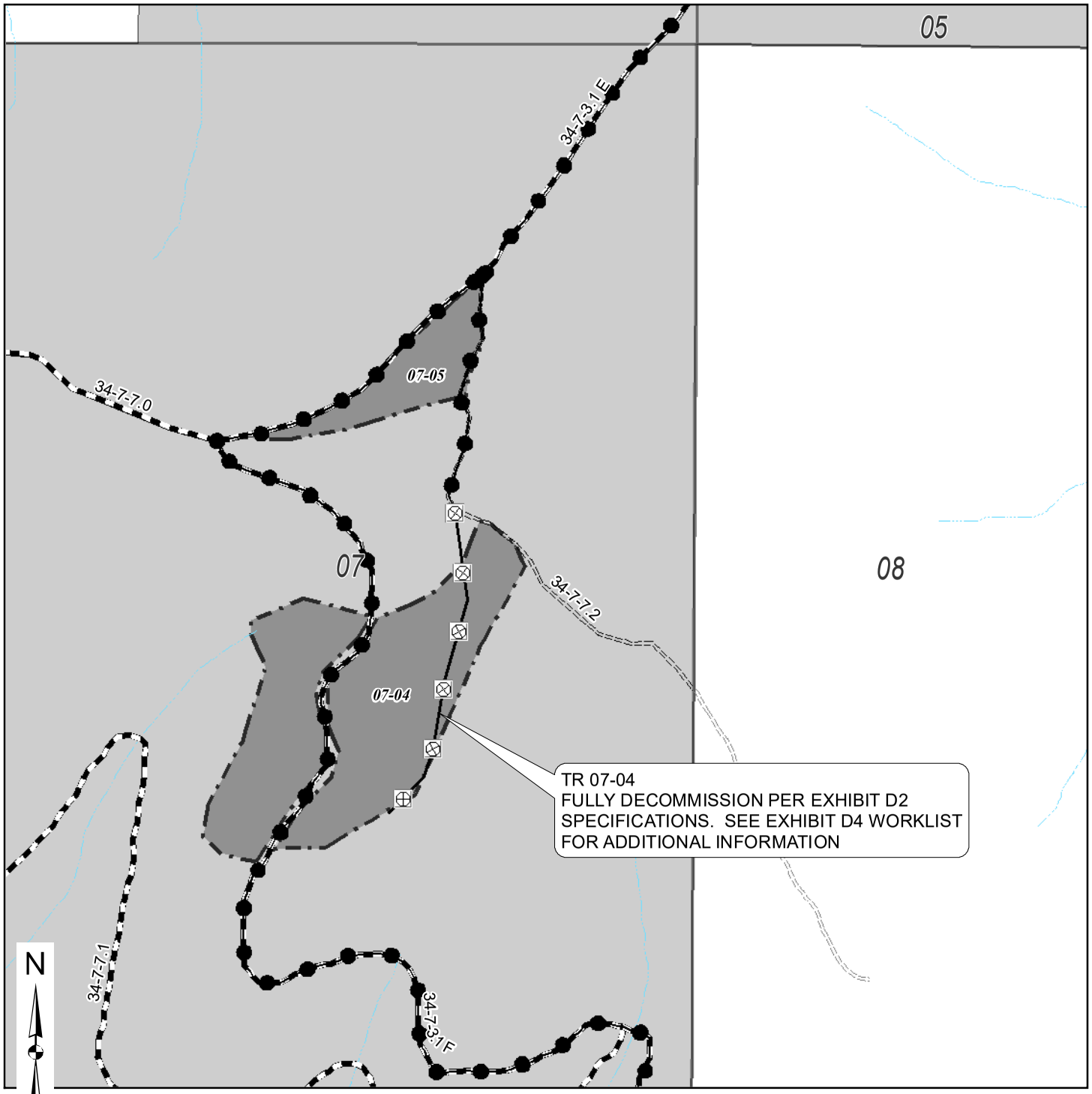

EXHIBIT D5-4

Legend

Land Ownership

- BLM
- USFS
- Private Lands
- Rum Creek Hazard Tree Units

Road Data by Surface

- Bituminous
- Aggregate
- Natural
- Unknown

Road Decommissioning Responsibility

- Remaining Haul Route
- Full Decommission
- Water Bar
- Gates
- Berms/Barricades

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

RUM CREEK HAZARD TIMBER SALE TR 07-04 DECOMMISSIONING MAP

DRAFTED BY: BLM	
DATE: MAY 2023	SHEET: 4 OF 4

EXHIBIT D6-1

ROAD NUMBER	FROM	TO	LENGTH	MAINTENANCE RESPONSIBILITY			DUST ABATEMENT/ WATERING	SPOT ROCKING **	ROAD CLOSURE AND DECOMMISSIONING					
				BLM MAINTENANCE	PURCHASER MAINTENANCE	THIRD PARTY MAINTENANCE			INSTALL EARTH/LOG BARRICADE	REMOVE CULVERTS	INSTALL WATER BARS	CAMOUFLAGE ROAD ENTRANCE (100 FT)	SUB-SOIL/ RIPPING/ DECOMPACT SUBGRADE	SOIL STABILIZATION (SLASH OR MULCH)
	MILE/STA	MILE/STA	MILE/STA	MILE	MILE	MILE	MILE	MILE	EA	EA	EA	EA	MILE/STA	ACRE
34-7-2.0 (A-B)	0.00	2.16	2.16		2.16		2.16							
34-7-3.0 (A1-A2)	0.00	2.07	2.07		2.07		2.07							
34-7-3.1 (A-F)	0.00	7.82	7.82		7.82									
34-7-5.1	0.00	1.89	1.89		1.89									
34-7-5.2	0.00	0.95	0.95		0.95									
34-7-7.2 (A)	0.00	0.11	0.11		0.11									
34-7-15.4	0.00	0.10	0.10		0.10									
34-7-21.6 (A-C)	0.00	2.86	2.86		2.86									
34-7-22.0 (A-B)	0.00	0.29	0.29		0.29									
34-7-29.2	0.00	2.08	2.08		2.08									
34-7-36.0 (K-O)	7.88	12.66	4.78		4.78									
34-8-15.0 (A)	0.00	1.11	1.11		1.11									
34-8-21.00 (A-B)	0.00	0.28	0.28		0.28									
34-8-21.3	0.00	0.13	0.13		0.13									
34-8-22.1 (B-C)	0.49	1.58	1.09		1.09									
34-8-22.2	0.00	0.62	0.62		0.62									
34-8-22.3	0.00	0.56	0.56		0.56									
PAGE 1 TOTALS			28.90		28.90		4.23							

DECOMMISSIONING NOTES

1. ALL TEMP ROUTE ARE TO BE DECOMMISSIONED PER EXHIBIT D SPECIFICATIONS AND DETAILS.

2. DECOMMISSIONING SHALL INCLUDE WATER BARRING, SLASHING OR MULCHING, AND BARRICADING..

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

**750CY OF SPOT ROCK SHALL BE FURNISHED AND PLACED ON AGGREGATE ROADS AFTER USE WHERE ROCK HAS BEEN DEPLETED AND APPROVED BY THE AUTHORIZED OFFICER. ROCK SHALL BE OBTAINED FROM A COMMERCIAL SOURCE AND SHALL MEET EXHIBIT C-11 SECTION 1200 SPECIFICATIONS.

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

RUM CREEK HAZARD
TIMBER SALE
ESTIMATE OF QUANTITIES*

DRAFTED BY: BLM	SCALE: NONE
DATE: MAY 2023	SHEET: 1 OF 2

EXHIBIT D6-2

ROAD NUMBER	FROM	TO	LENGTH	MAINTENANCE RESPONSIBILITY			DUST ABATEMENT/ WATERING	SPOT ROCKING**	ROAD CLOSURE AND DECOMMISSIONING					
				BLM MAINTENANCE	PURCHASER MAINTENANCE	THIRD PARTY MAINTENANCE			INSTALL EARTH/LOG BARRICADE	REMOVE CULVERTS	INSTALL WATER BARS	CAMOUFLAGE ROAD ENTRANCE (100 FT)	SUB-SOIL/ RIPPING/ DECOMPACT SUBGRADE	SOIL STABILIZATION (SLASH OR MULCH)
	MILE/STA	MILE/STA	MILE/STA	MILE	MILE	MILE	MILE	MILE	EA	EA	EA	EA	STA	ACRE
34-8-27.0 (A)	0.00	0.88	0.88	0.88										
34-8-27.1	0.00	0.66	0.66		0.66									
34-8-28.0 (A)	0.00	0.33	0.33	0.33										
34-8-28.0 (B)	0.33	1.58	1.25		1.25									
34-8-34.0 (A-B)	0.00	5.26	5.26	5.26										
34-8-36.0 (A1)	0.00	0.73	0.73	0.73										
35-7-4.0	0.00	0.37	0.37	0.37										
35-7-11.0 (A-C2)	0.00	6.05	6.05	6.05										
35-7-11.0 (C3-I)	6.05	14.66	8.61		8.61									
35-8-2.0 (A1-C)	0.00	6.50	6.50	6.50							26			
35-8-2.0 (D-E)	6.50	8.57	2.07		2.07									
TR 15-02-A	0+00	6+40	0.12		0.12				1		4	1		0.15
TR 15-02-B	0+00	8+15	0.15		0.15				1		8	1		0.20
TR 22-01	0+00	4+50	0.08		0.08				1		3	1		0.15
TR 07-04	0+00	7+70	0.15		0.15				1		5	1		0.30
PAGE 1 TOTALS			28.90		28.90		4.23							
PAGE 2 TOTALS			33.21	20.12	13.09				4		46	4		0.80
PROJECT TOTALS			62.11	20.12	41.99		4.23	750	4		46	4		0.80

DECOMMISSIONING NOTES

1. ALL TEMP ROUTE ARE TO BE DECOMMISSIONED PER EXHIBIT D SPECIFICATIONS AND DETAILS.

2. DECOMMISSIONING SHALL INCLUDE WATER BARRING, SEEDING & MULCHING, AND BARRICADING.

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

**750CY OF SPOT ROCK SHALL BE FURNISHED AND PLACED ON AGGREGATE ROADS AFTER USE WHERE ROCK HAS BEEN DEPLETED AND APPROVED BY THE AUTHORIZED OFFICER. ROCK SHALL BE OBTAINED FROM A COMMERCIAL SOURCE AND SHALL MEET EXHIBIT C-11 SECTION 1200 SPECIFICATIONS.

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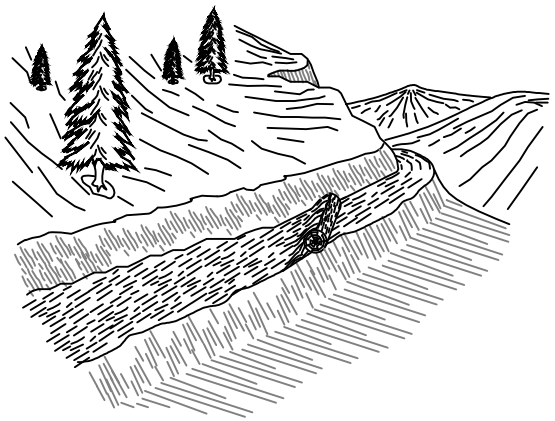
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MEDFORD DISTRICT - MEDFORD, OREGON

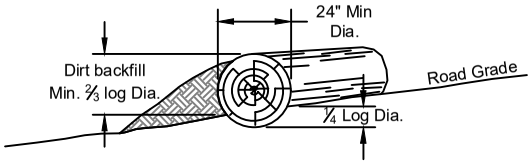
RUM CREEK HAZARD
TIMBER SALE
ESTIMATE OF QUANTITIES*

DRAFTED BY: BLM	SCALE: NONE
DATE: MAY 2023	SHEET: 2 OF 2

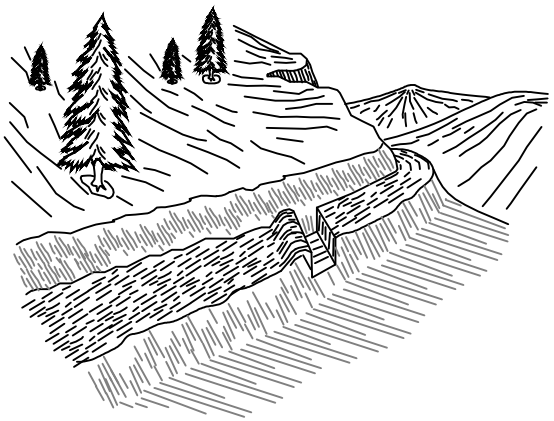
EXHIBIT D7



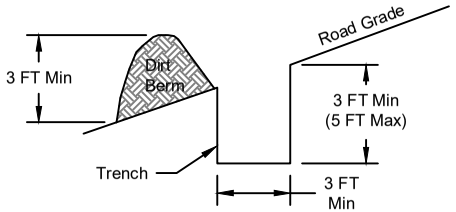
LOG BARRICADE



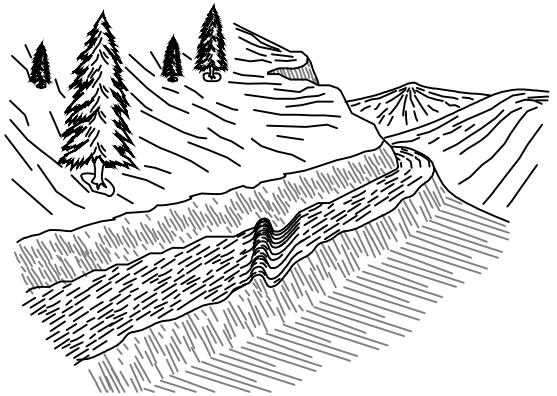
1. Log barricade shall be constructed as shown above.
2. Exact location is listed in Decommissioning Work List.
3. All barricades shall be skewed 30 degrees.
4. The log length shall extend from the cut bank to the fill slope.
5. The minimum small end diameter of the log barricade shall be 24".



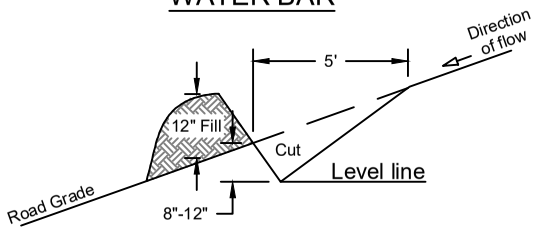
TRENCH BARRICADE



1. Trench barricade shall be constructed as shown above.
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.
4. Trench barricade length shall extend from the cut bank to the fill slope or to a point sufficient to prohibit the crossing of motor vehicle traffic.

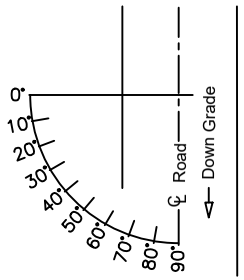


WATER BAR



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.

SKEW 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.

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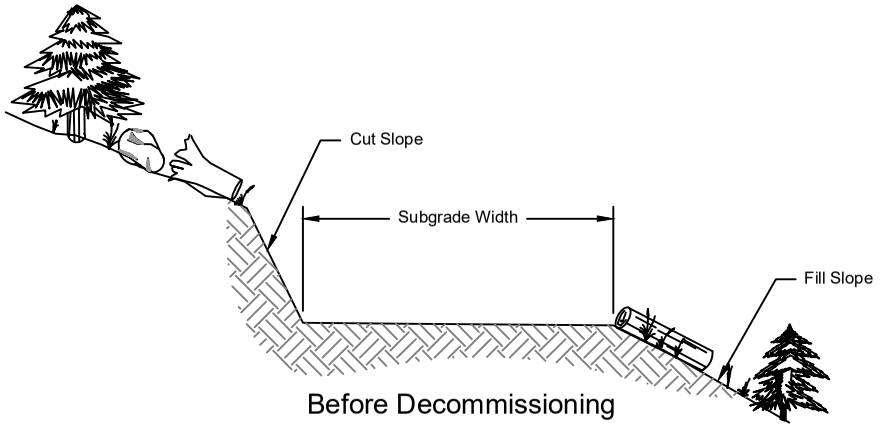
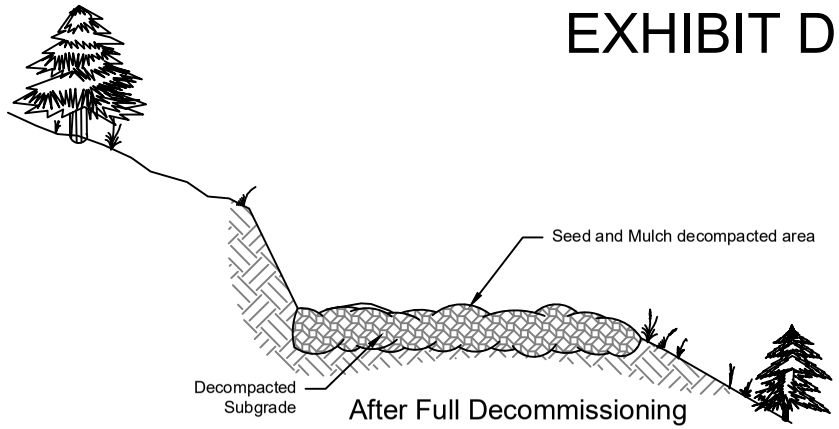
MEDFORD DISTRICT - MEDFORD, OREGON

RUM CREEK HAZARD TIMBER SALE BARRICADE AND WATER BAR DETAILS

DRAFTED BY: BLM	SCALE: NONE
DATE: MAY 2023	SHEET: 1 OF 1

EXHIBIT D8





Typical Full Decommission

Notes:

1. The Purchaser shall barricade and decompact the temp route subgrade. Barricades shall be constructed as shown in Exhibit D Barricade and Water Bar Details.
2. Ditch lines at intersecting existing roads will be restored to their original shape.
3. Road surface shall be covered with slash. If enough slash is not available to cover entire road, then remaining disturbed areas shall be mulched with weed-free straw.
4. All temporary culverts (if any) shall be removed from temp routes entirely. Excavated culvert trenches shall be left open to drain and have side slopes laid back to 1½:1. Where draw culverts are removed, the grade of the channel shall be restored to match existing stream grade. Culverts not designated as salvage for the Government shall become the property of the Contractor. The Contractor shall be responsible for legally disposing of material.
5. See Section 1800 for Mulching Specifications.

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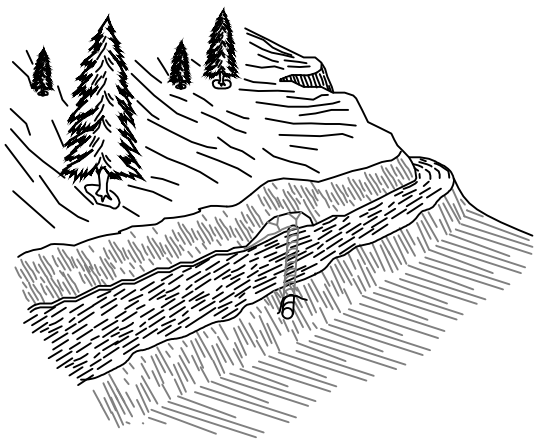
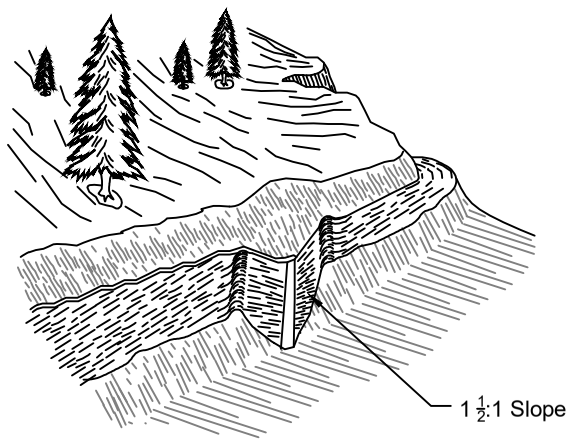


Typical Culvert Removal - Before



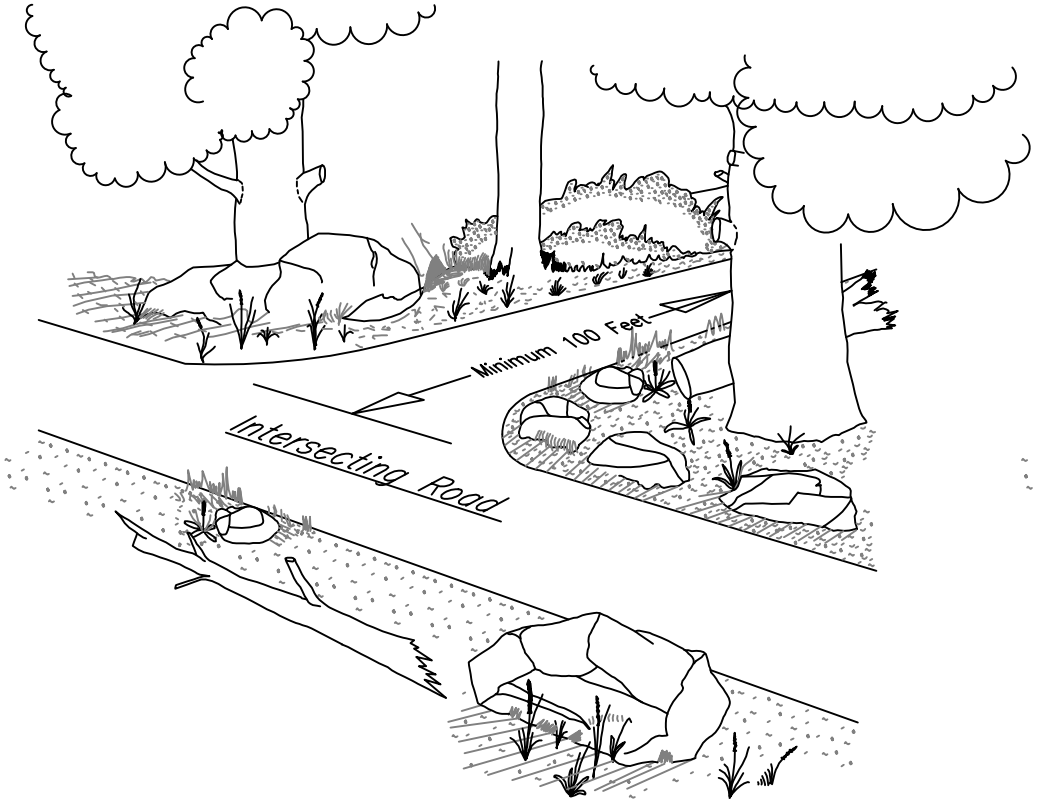
Typical Culvert Removal - After

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

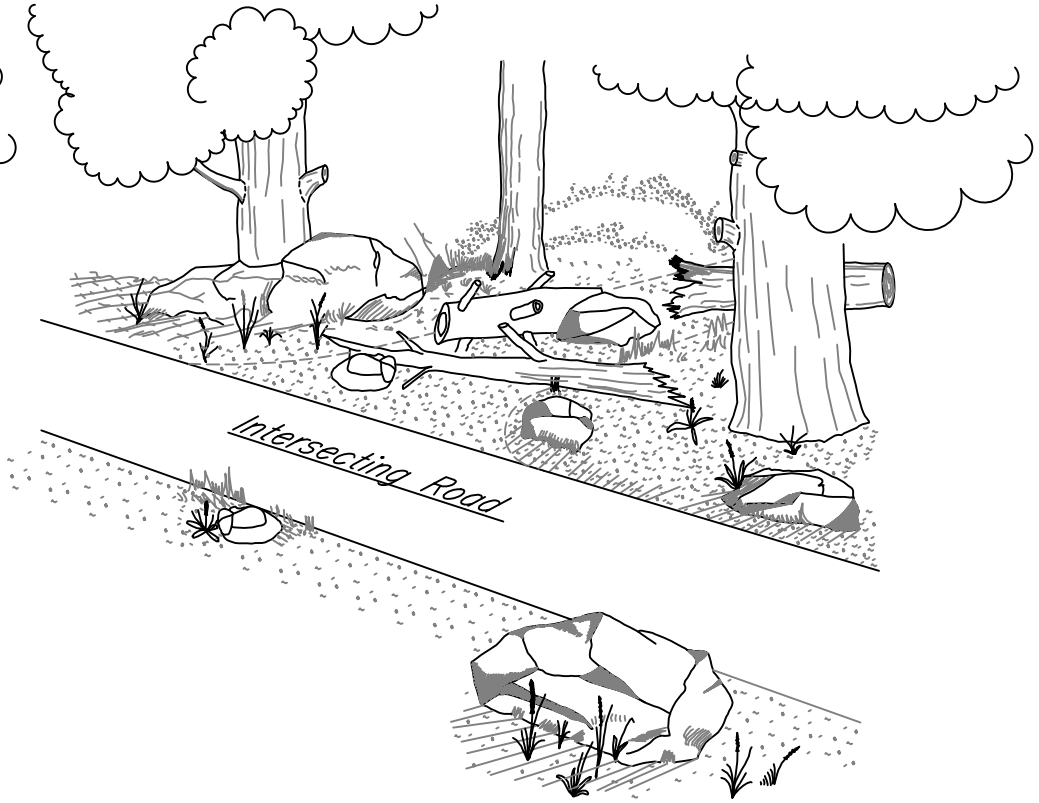
RUM CREEK HAZARD TIMBER SALE DECOMPACTION AND CULVERT REMOVAL DETAILS

DRAFTED BY: BLM	SCALE: NONE
DATE: MAY 2023	SHEET: 1 OF 1

EXHIBIT D9



Typical Entrance - Before



Typical Entrance - After

NOTES:

1. The Purchaser shall barricade and Camouflage the road prism and disguise the roadbed so that the road entrance and roadway are indiscernible from the intersecting road. Camouflaged entrances shall consist of logs, slash, boulders and others debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage vehicle use. An Earth Berm or equivalent barricade shall be constructed at road entrance as approved by the Authorized Officer..

2. Where multiple entrances exist, the work shall include obscuring all road entrances. Ditchlines at intersecting roads will be restored as indicated on plan view. The Purchaser shall use soil, boulders, brush, dead material, stumps, and other debris to disguise the road prism to the extent possible. No live trees should be used without approval of the Authorized Officer.

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

RUM CREEK HAZARD
TIMBER SALE
TYPICAL ROAD
CAMOUFLAGE DETAIL

DRAFTED BY: BLM	SCALE: NONE
DATE: MAY 2023	SHEET: 1 OF 1

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SELECTION CRITERIA-DESIGNATION BY PRESCRIPTION EXHIBIT F

The Selection Criteria shown below shall be used by the Purchaser in determining which trees are to be retained and which trees are to be cut and removed. Consider safety in determining whether a fire-killed or fire-injured snag should remain standing. The operator will have flexibility and responsibility to remove any snag or tree deemed unsafe for workers on site.

The Purchaser shall leave all boundary trees marked with orange paint and/or poster tags. Within harvest units, the Purchaser shall also leave live hardwoods > 8" diameter at breast height (DBH) and live green conifers with a probability of mortality (Pm) below 60%, as defined in Table 1 of this Exhibit.

Before cutting and removing any trees necessary to facilitate logging in all 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.

MARKING GUIDELINES FOR FIRE-INJURED TREES

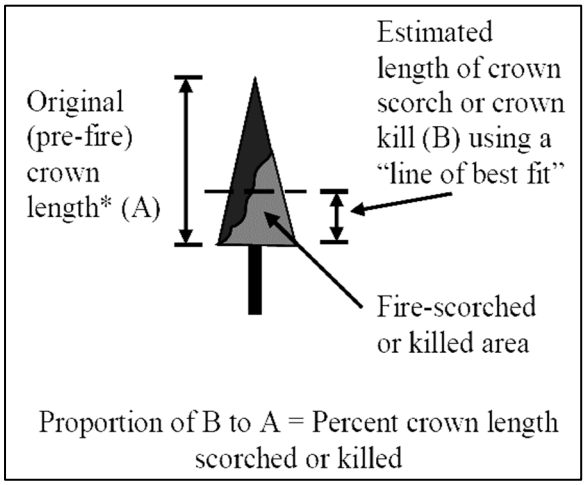
The model for fire mortality trees utilizes the methods and procedures detailed in USFS Marking Guidelines for Fire-Injured Trees in California (Smith & Cluck, 2011), this document may be used as supplemental information by the Purchaser if needed. The method uses percent crown killed only or in combination with other guiding variables, such DBH and/or the presence of absence of bark beetle activity, to determine mortality probability. Percent crown kill is a measure of the proportion of foliage that includes any brown needles, as well as any areas that have blackened fine branches relative to the entire amount of foliage that was present before the burn. Lower branches that are presumed to have died before the fire should not be included when determining crown kill. Using the probability of mortality, this model also offers flexibility to accommodate BLM management goals and objectives for salvage operations.

A probability of mortality (Pm) of 60% or greater has been selected as the target for removal (Table and Figure 1) based on the following project objectives:

- Keep roads clear of hazard trees and debris
- Improve worker safety involved in reforestation and subsequent maintenance of the site
- Retain those trees that have a moderate to high probability of survival for satisfying other resource needs

Table and Figure 1. Crown scorch levels for 60% predicted mortality

Pm=0.6 level		
	Douglas-fir	
	DBH	**Percent Crown Volume Killed**
	4-40”	70
	Ponderosa pine	
	DBH	**Percent Crown Length Killed**
	10-29”	55
	30-40”	30
	41-50”	15
	Incense cedar	
	DBH	**Percent Crown Length Killed**
	10-60”	85
	Sugar pine	
	DBH	**Percent Crown Length Killed**
	10-60”	55
	White Fir	
	DBH	**Percent Crown Length Killed**
	10-35”	80
	>35-60”	65



Retain trees that meet the following criteria:

1. Conifers with a less than 60% probability of mortality (see above Table and Figure 1).
2. Live hardwoods > 8 inches DBH.
3. Snags with prominent structural complexity such as broken or forked tops and large limbs that provide wildlife habitat benefit should be left when there is no immediate safety risk. Photos of example desired wildlife leave trees are shown below.
4. Retain at least 2% cover of Coarse Woody Debris (CWD) as an average at the scale of the treatment area.
5. Cull material and existing CWD should be left in place within the unit to the extent possible.
6. Maintain northern spotted owl dispersal and nesting/roosting/foraging habitat post-harvest in portions of units 6-1, 7-1, 15-3, 15-4, 15-5, 16-1, 17-1, 22-1, 22-2, 23-1, 26-1, 27-1, 29-1, and 29-2 as shown on Exhibit A maps. If the portions of the units shown on the Exhibit A maps no longer meet the minimum requirements for each habitat type described below, then notify the Authorized Officer (who will take photographic and

written documentation of the current stand conditions and discuss harvest requirements with the wildlife biologist).

Dispersal Maintain Units: 6-1 (0.5 ac), 15-3 (1 ac), 15-5 (2 ac), 16-1 (1 ac), 22-2 (4 ac), 26-1 (0.2 ac), 29-1 (0.8 ac)	**Nesting-roosting-foraging Maintain Units: 6-1 (1 ac), 7-1 (4 ac), 15-3 (0.3 ac), 15-4 (0.4 ac), 15-5 (1.4 ac), 17-1, (1 ac), 22-1 (2.5 ac), 22-2 (1.5 ac), 23-1 (2 ac), 27-1 (1 ac), 29-1 (1 ac), 29-2 (5 ac)**
o Canopy cover in treated dispersal-only units would be retained at an average of 40 percent, which would provide the minimum canopy cover to function as dispersal-only habitat.	o Nesting-roosting habitat (NR) would retain an average of 60 percent canopy cover. Generally, no more than 20 percent of the existing basal area would be removed in NRF habitat. This includes having at least 180 ft^2/acre total basal area (conifer and hardwoods) retention. o Multiple canopy layers would be retained in stands with more than one layer present prior to treatment.

***Minimize the use of flagging, posters, and tree marking paint that is visible from the road and stream when operating in and identifying trees for cutting or retention in the Congressionally Reserved land use allocation portions of units 15-2, 15-5, and 21-1 as shown on Exhibit A.**

REFERENCES:

Smith & Cluck. 2011. Marking Guidelines for Fire-Injured Trees in California. U.S. Forest Service, Region 5, Forest Health Protection. May 2011. (Report # RO-11-01).

Examples of Desirable Wildlife Leave Tree

DEFINITIONS

Conifer: An evergreen tree that produces cones, needle-shaped leaves, and wood known commercially as "softwood".

Coarse Woody Debris (CWD): Logs lying on the forest floor that include merchantable and non-merchantable material in all decay classes.

DBH: Diameter of the tree at breast height, measured at four point five feet (4.5') above the ground level from the uphill side of the tree.

Fire-Killed Tree: A standing or fallen conifer tree with 100% of the crown scorched showing brown needles or the crown is black with no needles.

Fire-Injured Tree: A conifer tree exhibiting crown scorch while still retaining green needles. Some fire-injured trees may die within the next 4 years (Appendix 1).

Fire-Injured Trees with a High Probability of Mortality: Standing trees that meet the description of fire-killed or fire-injured trees with a high probability of mortality defined in Table and Figure 1.

Hardwood: A live green broad-leaved tree which usually has a single well-defined trunk, exhibits > 30% live crown ratio and is capable of attaining a height greater than 20 feet. These include, but are not limited to alder, chinquapin, bigleaf maple, madrone, and oak species. Sprouting hardwood species may be in the form of multi-stemmed clumps originating from the base of a single defined stump.

Leave tree: Live green tree to be retained within the specifications of this prescription. These include live green conifers and large hardwoods, as well as fire-injured trees with a low probability of mortality as designated in Table and Figure 1.

Percent crown scorch: A measure of the proportion of foliage that has been killed by the fire relative to the entire amount of foliage that was present before the burn (scorched foliage should be obvious to the naked eye as yellowish brown or red needles).

Snag: 1. A dead or dying tree with physical characteristics exhibiting varying rates of decomposition.

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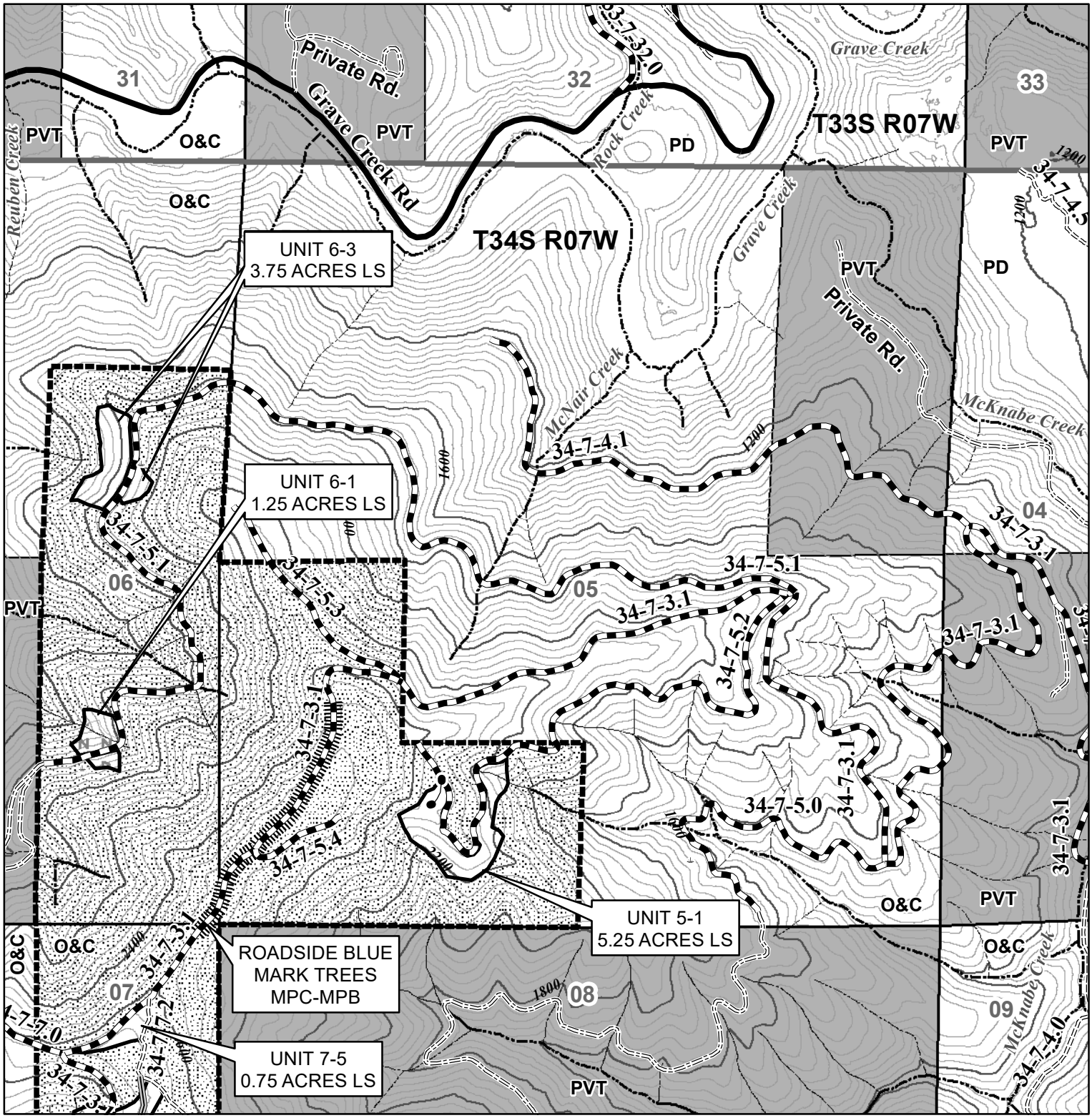
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0011
T. 34 S., R. 7 W., SEC. 5 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



0 750 1,500 3,000 Feet

1 inch = 1,000 feet

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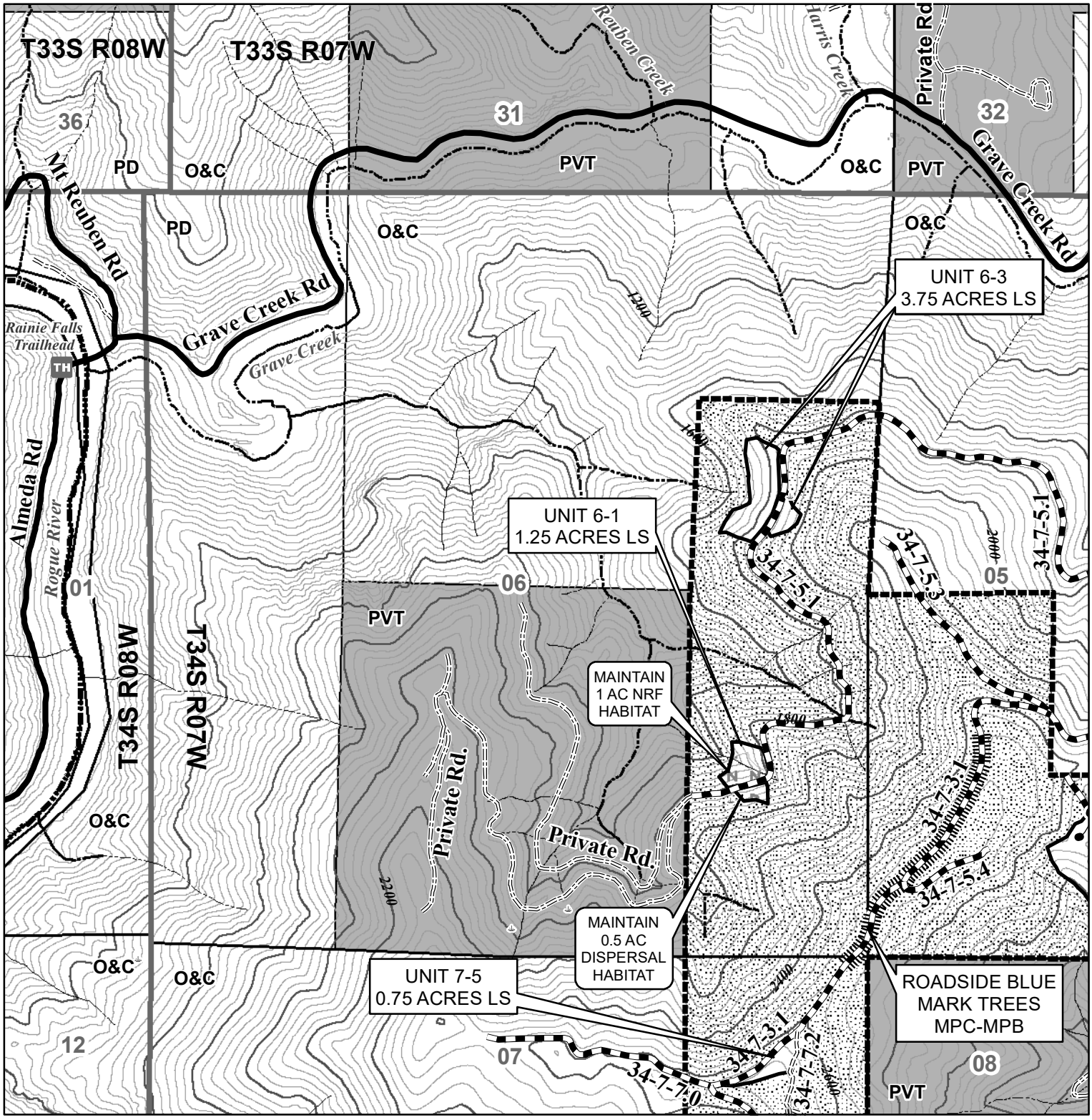

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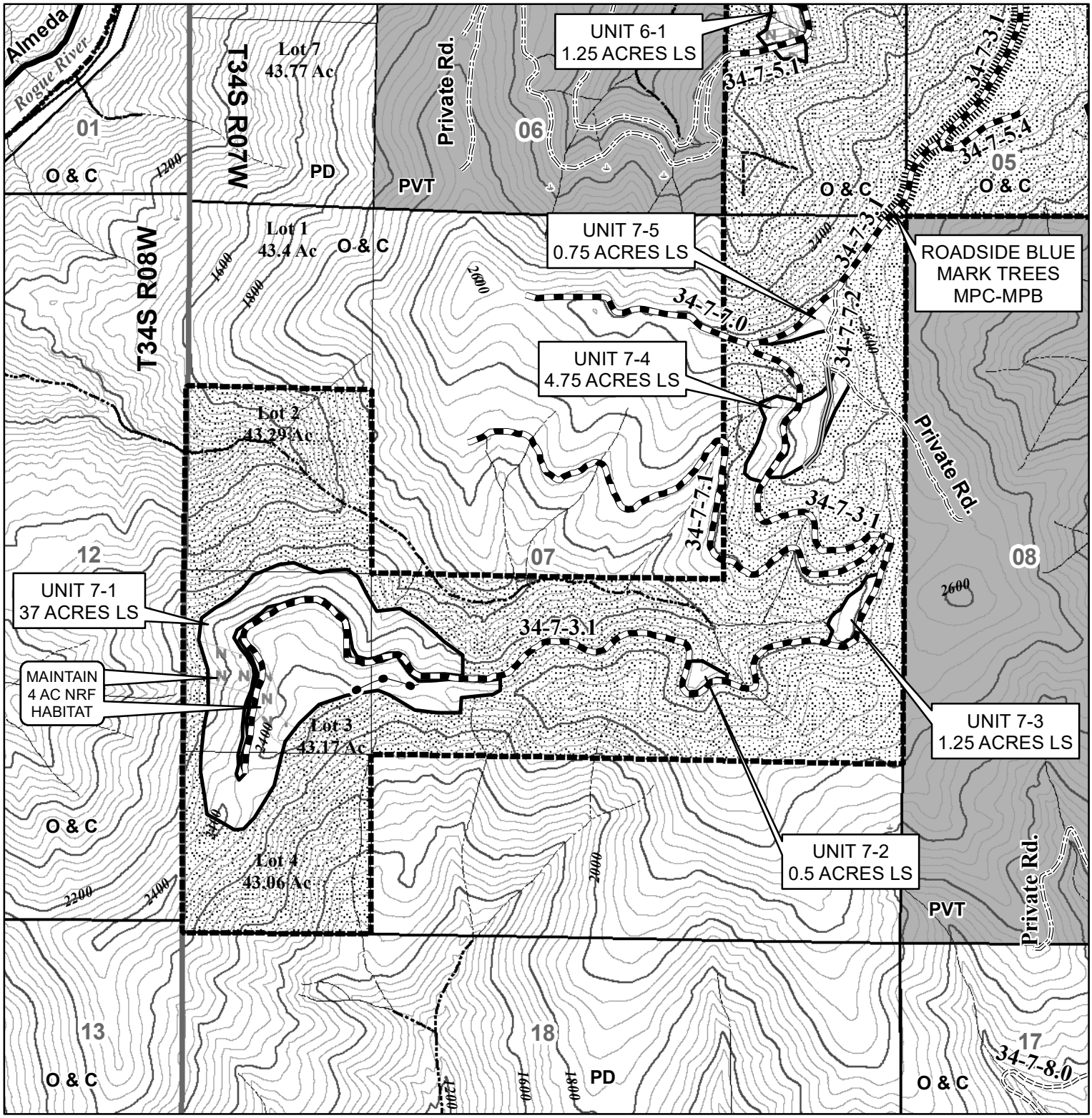
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0011
T. 34 S., R. 7 W., SEC. 7 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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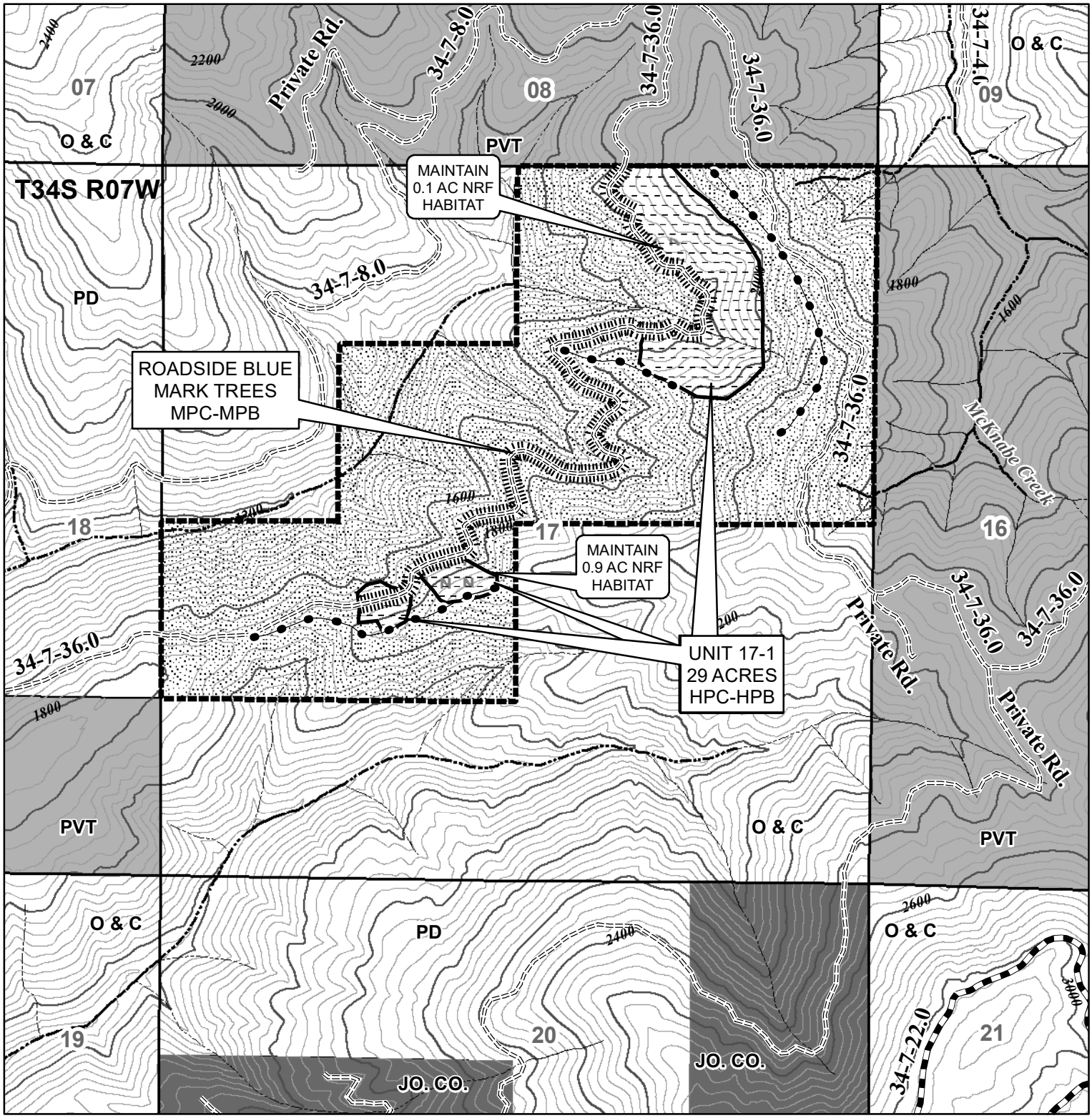
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0011
T. 34 S., R. 7 W., SEC. 17 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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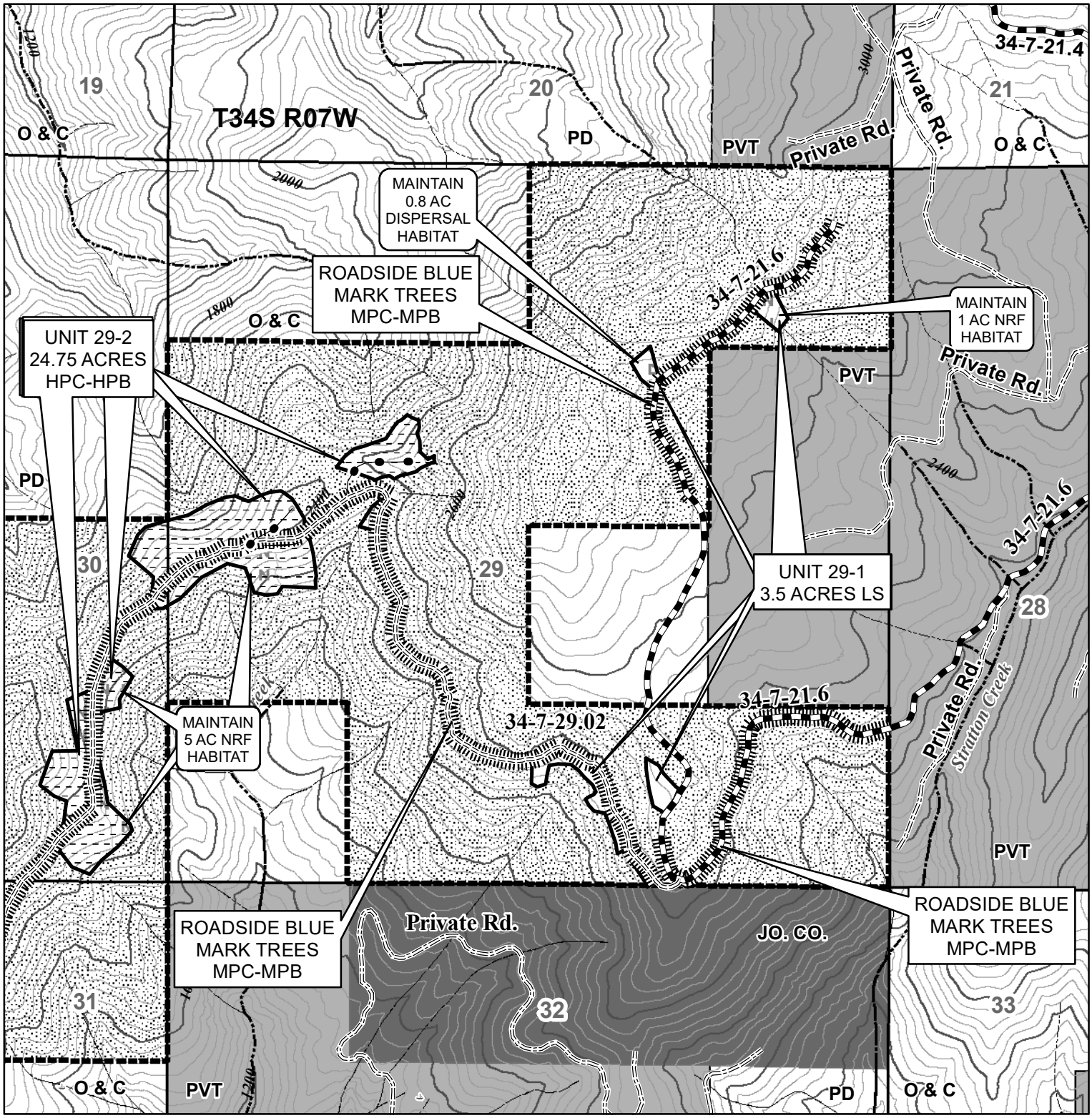
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0011
T. 34 S., R. 7 W., SEC. 29 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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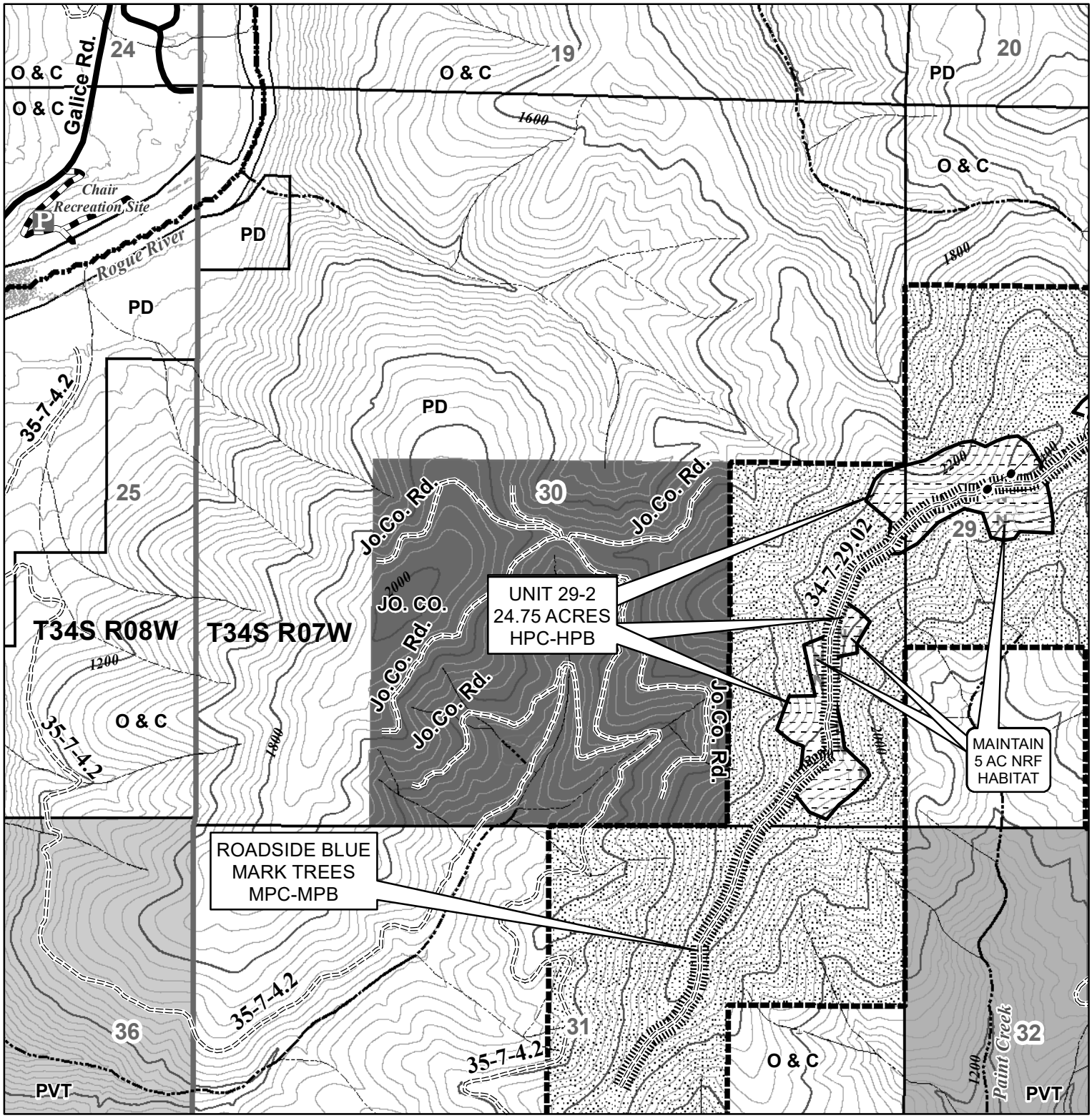
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0011
T. 34 S., R. 7 W., SEC'S 30 & 31 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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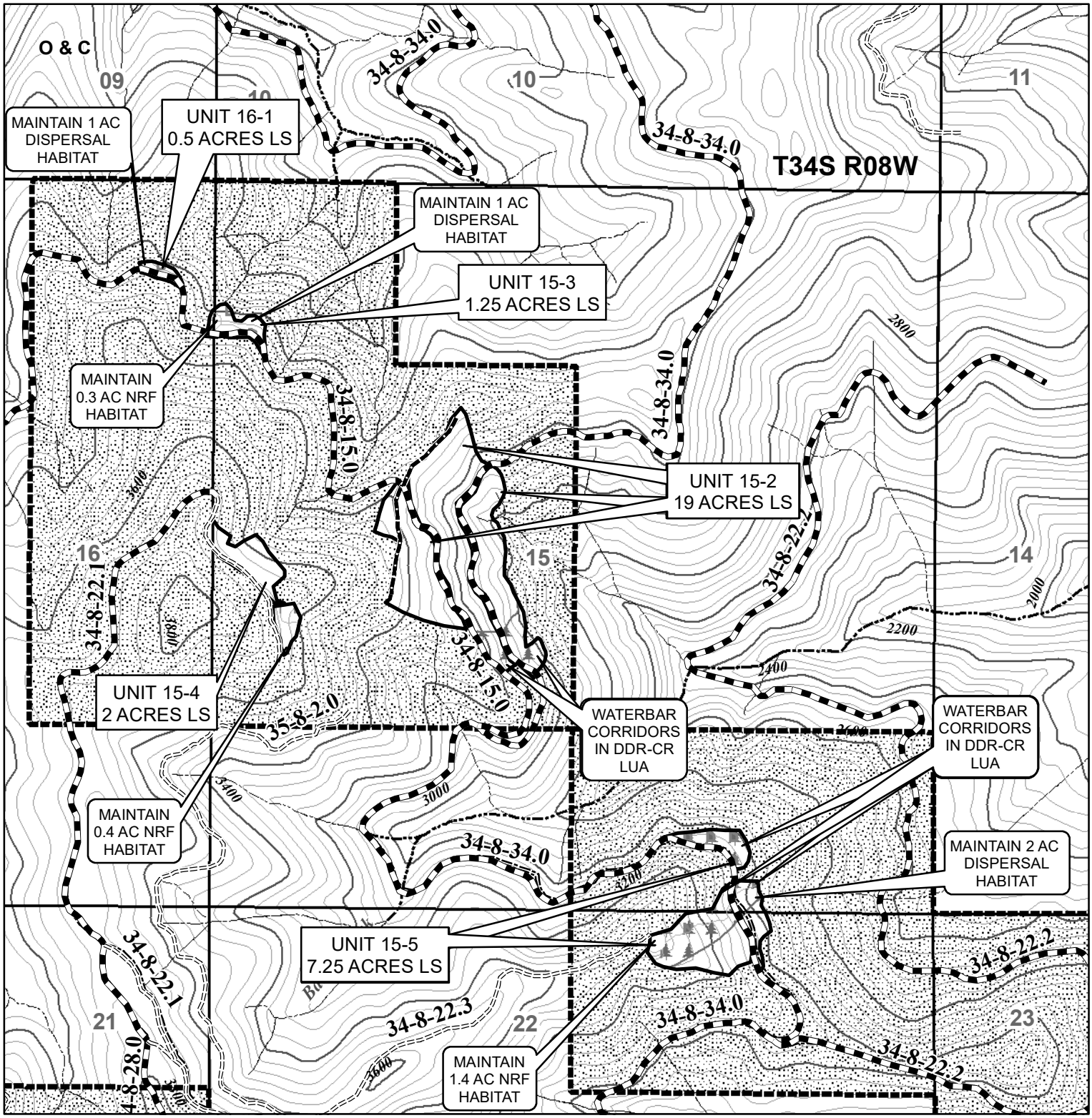
T. 34 S., R. 8 W., SEC'S 15 &16 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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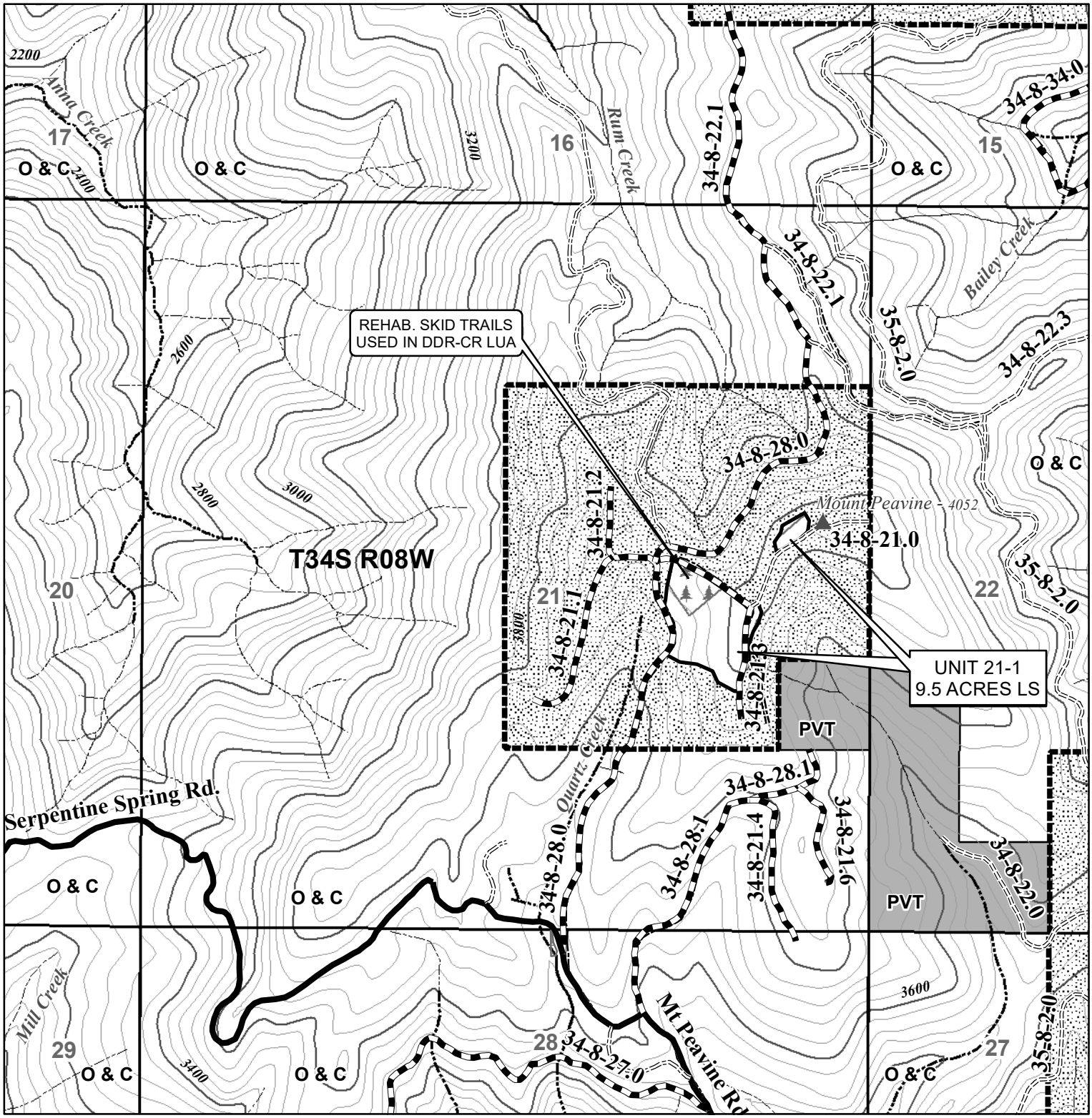
T. 34 S., R. 8 W., SEC. 21 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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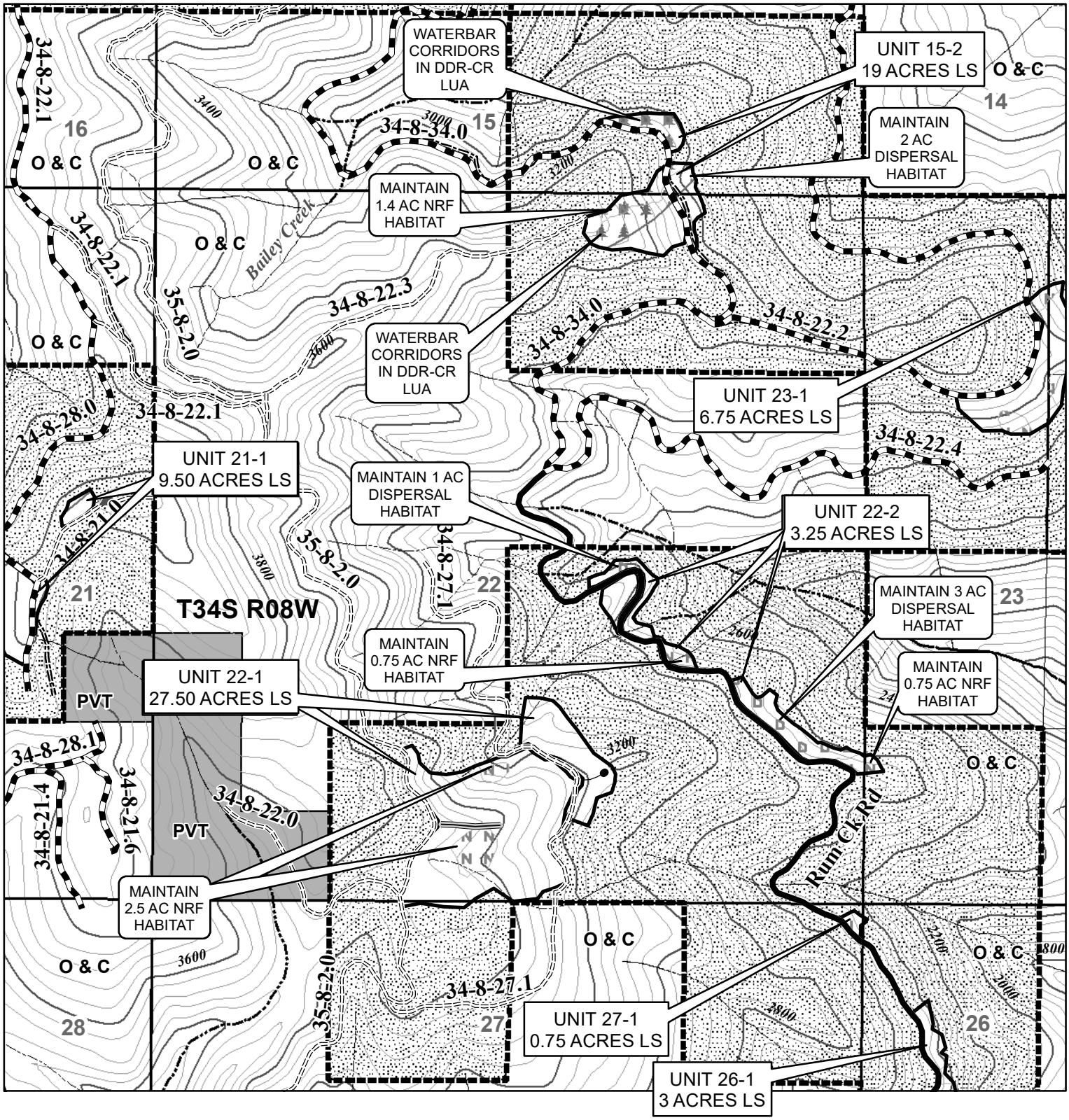
U.S.D.I BLM MEDFORD DISTRICT SALE NO. ORM07-TS-2023.0011
T. 34 S., R. 8 W., SEC. 22 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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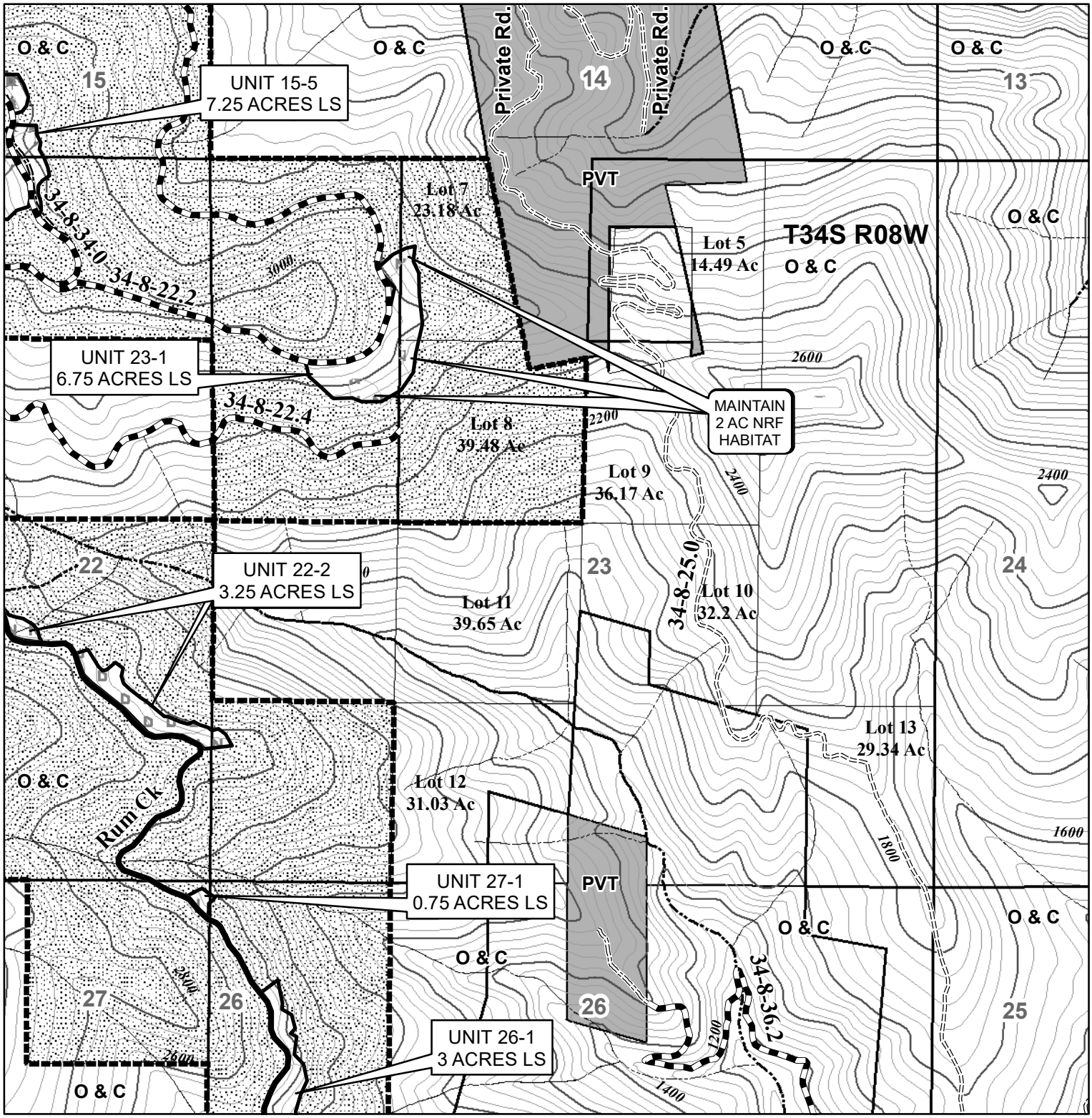
T. 34 S., R. 8 W., SEC. 23 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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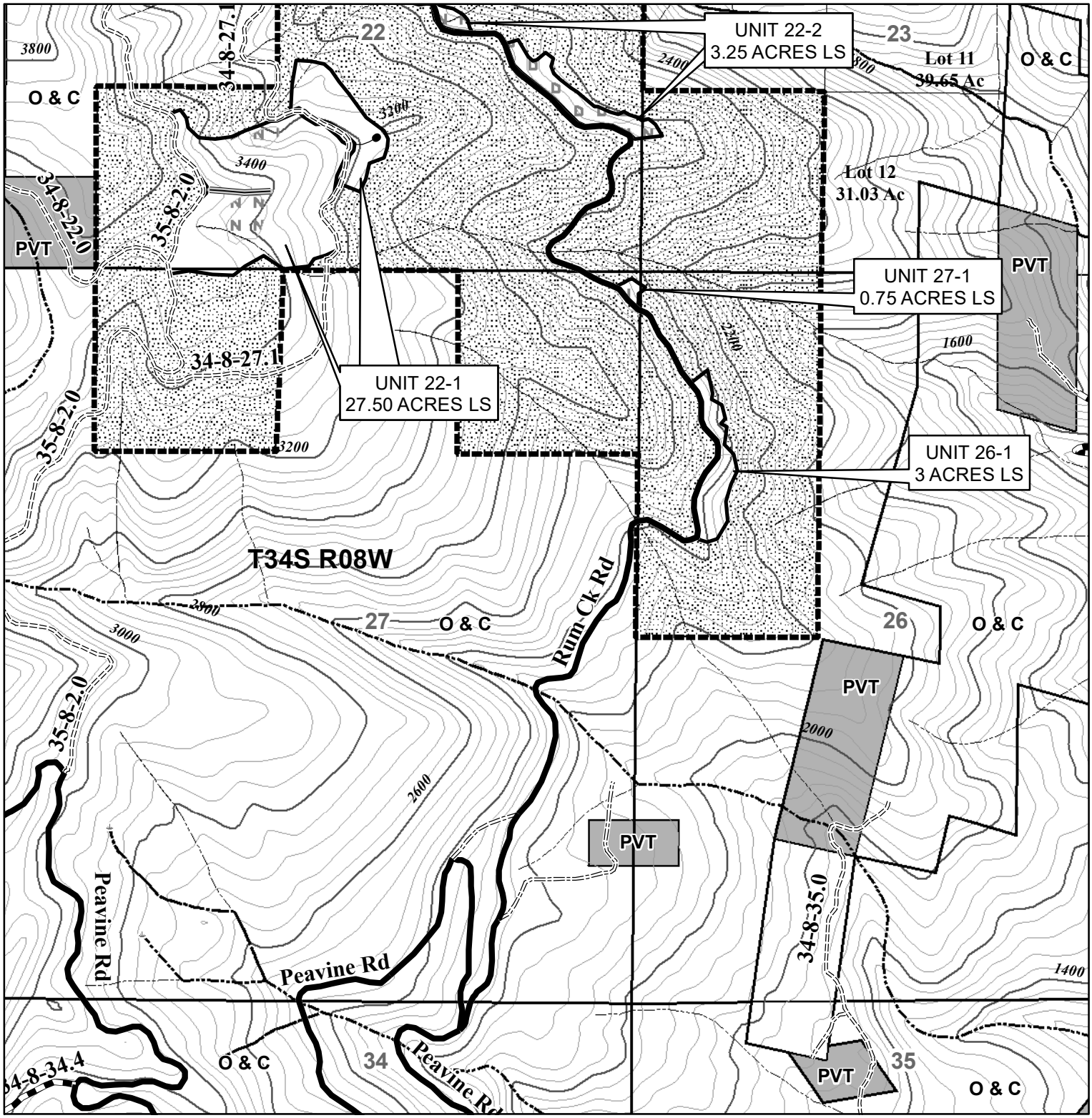
T. 34 S., R. 8 W., SEC'S 26 & 27 WILL. MER.
RUM CREEK HAZARD TIMBER SALE
JOSEPHINE COUNTY

TIMBER SALE CONTRACT MAP
EXHIBIT S



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Legend

- Mountain Peak
- Gate
- Parking Area
- Trailhead
- Seep or Spring
- Intermittent Stream
- Perennial Stream
- Rogue River
- Intermediate 40-ft contour
- Index 200-ft contour
- Tractor-Swing Route

Rum Creek Hazard Road Construction

- Temporary Route Construction
- Temporary Route Reconstruction

Road

SurfaceType

- Paved
- Rocked
- Natural Surface
- Individual Roadside Hazard Trees - Blue (Cut) Tree Mark - Machine Pile Cover - Machine Pile Burn

Rum Creek Hazard TS Units

Slash Disposal Treatment

- Lop & Scatter
- Hand Pile Cover - Hand Pile Burn

Rum Creek Hazard Owl Habitat Maintain Areas

- D D D Dispersal Maintain
- N N N Nesting Roosting Foraging Maintain
- Rum Creek Hazard Units in Congressional Reserved LUA
- Contract Area Boundary
- Reserve Area
- Township and Range
- Section
- Lot

Ownership

- O & C Bureau of Land Management O & C Lands
- PD Bureau of Land Management Public Domain Lands
- JO. CO. Josephine County
- ODF Oregon Department of Forestry
- PVT Private

LS = LOP & SCATTER
HPC-HPB = HAND PILE & COVER, HAND PILE BURN
MPC-MPB = MACHINE PILE & COVER, MACHINE PILE BURN

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LEGEND

UNIT	UNIT ACRES	SLASH DISPOSAL TREAMENT PRESCRIPTION	HAND PILE TREATMENT AREA DESCRIPTION
5-1	7	LS	N/A
6-1	2	LS	N/A
6-3	5	LS	N/A
7-1	43	LS	N/A
7-2	1	LS	N/A
7-3	2	LS	N/A
7-4	7	LS	N/A
7-5	1	LS	N/A
15-2	25	LS	N/A
15-3	2	LS	N/A
15-4	4	LS	N/A
15-5	10	LS	N/A
16-1	1	LS	N/A
17-1	29	HPC-HPB	WHOLE UNIT
21-1	10	LS	N/A
22-1	32	LS	N/A
22-2	8	LS	N/A
23-1	9	LS	N/A
26-1	5	LS	N/A
27-1	1	LS	N/A
29-1	6	LS	N/A
29-2	30	HPC-HPB	WHOLE UNIT
BM	3	MPC-MPB	WHOLE UNIT
TOTAL	**243**		

* BOUNDARIES OF HARVEST UNITS ARE POSTED AND PAINTED IN ORANGE

LS = LOP & SCATTER

HPC-HPB = HAND PILE & COVER, HAND PILE BURN

MPC-MPB = MACHINE PILE & COVER, MACHINE PILE BURN

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