PROSPECTUS

LUMP SUM SALE

BUTTE FALLS FIELD OFFICE JACKSON MASTER UNIT

Medford Sale # ORM05-TS-2021.0008 April 28, 2022 (KD)

1 Round Mountain South (6310) Jackson County, O&C

BID DEPOSIT REQUIRED: \$ 245,000.00

All timber designated for cutting in; S½NE¼,Gov Lot 2, Gov Lot 3, Gov Lot 4, S½NW¼, SW¼, SE¼, Sec 5; Gov Lot 7, Sec 6; NE¼NE¼, S½NE¼, E½NW¼, Gov Lot 1, Gov Lot 2, E½SW¼, Gov Lot 3, Gov Lot 4, SE¼, Sec 7; SE¼NW¼, Gov Lot2, NE¼SW¼, Gov Lot 3, SE¼, Sec 31; SW¼, Sec 32; T. 33 S., R. 3 E.; SW¼NE¼, E½SW¼, NE¼SE¼, S½SE¼ Sec 12; NW¼NE¼, E½NW¼, Sec 13; T. 34 S., R. 3 E.; 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
15,086	5,723	white fir	6,943	\$143.80	\$998,403.40
11,438	2,824	Douglas-fir	3,442	\$384.10	\$1,322,072.20
1552	374	ponderosa pine	472	\$31.70	\$14,962.40
2660	250	incense-cedar	324	\$232.20	\$75,232.80
1,155	226	western hemlock	280	\$133.80	\$37,464.00
48	27	sugar pine	34	\$31.80	\$1,081.20
31,939	9,424		11,495		\$2,449,216.00

^{*}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.

CRUISE INFORMATION -- Douglas-fir, white fir, ponderosa pine, western hemlock and incense cedar have been cruised using the 3-P sampling methods to select sample trees. Sugar pine and was 100% cruised. Maps showing the location and description of these sample trees are available at the Medford District Office. The sample trees have been measured using the volt system of measurement, and the volume expanded to a total sale volume. With respect to merchantable trees of all conifer species: the average tree is 18.2 inches DBHOB; the average gross merchantable log contains 96 bd. ft.; the total gross volume is approximately 13,225 MBF; and 87% recovery is expected (Average WF is 19.1 inches DBHOB; average gross merchantable log WF contains 111 bd. ft.). Bidders will be restricted to bidding on a unit (MBF) rate of the white fir volume. All other species will be sold at appraised price per unit (MBF). The minimum bid increment will be \$0.10 per MBF.

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

The BLM has revised the log export restrictions special provision to reduce the log branding and painting requirements. The new requirements include branding of one end of all logs with a scaling diameter of over 10 inches. All loads of 11 logs or more, regardless of the diameter of the logs, will have a minimum of 10 logs branded on one end. All logs will be branded on loads of 10 logs or less. One end of all branded logs will be marked with yellow paint. At the discretion of the Contracting Officer, the Purchaser may be required to brand and paint all logs. The Purchaser shall bear any increased costs for log branding and painting

<u>CUTTING AREA</u> -- Twenty-two (22) units containing approximately six hundred forty four (644) acres must be logged. Approximately one (1) right of way acre must be clear-cut for temporary road construction, and

approximately three (3) right of way acres must be clear-cut for permanent road construction.

<u>CUTTING TIME</u> -- Contract duration will be **forty-eight (48) months** for cutting and removal of timber.

ACCESS - Access to the sale area is available via public roads and through the contract area using BLM Roads and via Right-of-way and Road Use Agreement M-2000C with Silver Butte Timber Company, via Right-of-way and Road Use Agreement M-2000D with Juniper Properties, LLC, via Right-of-way and Road Use Agreement M-2000E with John Hancock Life Insurance Company, via Right-of-Way and Road Use Agreement M-2000F with Siskiyou Timberlands, LLC., and via a license agreement with the Forest Service. Among other conditions, agreement M-2000C with Silver Butte Timber Company requires completion of a license agreement between the Purchaser and Silver Butte Timber Company, road maintenance to be performed by the Purchaser or BLM and an estimated payment of a road surface replacement fee of \$224.42.

Among other conditions, agreement M-2000D with Juniper Properties, LLC requires completion of a license agreement between the Purchaser and Juniper Properties, LLC, road maintenance to be performed by the Purchaser or BLM, and rock to be placed on the 34-3E-12.00 B road in lieu of surface replacement fees. Among other conditions, agreement M-2000E with John Hancock Life Insurance Company requires completion of a license agreement between the Purchaser and John Hancock Life Insurance Company, road maintenance to be performed by the Purchaser or BLM and an estimated payment of a road surface replacement fee of \$5,358.28. Among other conditions, agreement M-2000F with Siskiyou Timberlands, LLC requires completion of a license agreement between the Purchaser and Siskiyou Timberlands, LLC, road maintenance to be performed by the Purchaser or BLM, and an estimated payment of a road surface replacement fee of \$2,386.61. Among other conditions, license agreement with the Forest Service requires completion of a license agreement between the Purchaser and Forest Service, road maintenance to be performed by the Purchaser or BLM and an estimated payment of a road surface replacement fee of \$806.36.

<u>ROAD MAINTENANCE</u> – The Purchaser will be required to maintain all permanent roads (30.24 stations) and temporary routes (22.17 stations) they construct plus 10.78 miles of existing BLM and private roads. The BLM will maintain the approximately 19.53 miles of existing BLM and private roads.

<u>ROAD CONSTRUCTION</u> – The contract will require the Purchaser to construct 7.37 stations and construct and surface 22.87 stations of permanent roads and construct 22.17 stations of temporary roads.

<u>SOIL DAMAGE PREVENTION:</u> -- Pursuant to Section 26 of Form 5450-3, Timber Sale Contract, the Purchaser shall not operate or cause to have operated on the contract area any tractor-type logging equipment when soil moisture content at six (6) inch depth exceeds twenty-five (25) percent by weight as determined by the oven dry method.

EQUIPMENT REQUIREMENTS

- 1. A yarding tractor not greater than 9 feet in track width equipped with a integral arch and winch system capable of lining logs at least 75 feet.
- 2. A subsoiler, wing-toothed subsoiler, excavator with ripping attachment, or equivalent is required.
- 3. A yarder capable of achieving lead end suspension.
- 4. A yarder capable of achieving full suspension in unit 31-10, 32-4B and unit 7-3.
- 5. A yarder equipped with a haul back to log unit 31-10 and 32-4B.

<u>SLASH DISPOSAL</u> -- Perform logging residue reduction and site preparation work on approximately five hundred seventy-five (575) acres of harvest area as directed by the Authorized Officer.

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

- 1. Comply with the Endangered Species Act, or;
- 2. Comply with a court order, or:
- 3. Protect species which were identified for protection in accordance with management direction established in the ROD and RMP. This contract provision limits the liability of the Government to the actual costs incurred by the Purchaser which have not been amortized by timber removed from the contract area.

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

OTHER

- 1. Units 5-1, 5-2, 5-5, 5-6, 31-5, 31-6, 31-10, and 32-1 as shown on Exhibit A, are thinning harvest prescriptions.
- 2. Unit 7-1, 7-2, 7-3, 7-4, 7-5, 12-1, 12-2, 12-3, 12-4, 13-2, 31-7, 32-4 and 32-4B as shown on exhibit A, are regeneration harvest prescriptions.
- 3. There are roadside vegetation maintenance units
- 4. No extension of time beyond the normal 30 days will be granted for completing bonding and contract signing requirements.
- 5. This contract includes an additional special provision to ensure the Purchaser understands he/she is required to conduct all operations in compliance with Contract Section 12 (Purchaser's Contractual Responsibilities for Liability) and Contract Section 29 (Safety and Health) and the Special Provisions included in Section 42 of this Contract.
- 6. Purchaser shall be responsible for complying with all county, state, and federal laws and regulations that relate to the execution of this contract (See Sec. 29 of contract).
- 7. Directional falling is required.
- 8. There is a pre-designated existing skid trail in unit 7-2. Equipment will be required to stay on pre-designated skid trail while crossing thru the riparian management zone. Existing culvert will need to be removed immediately after harvest operations are complete and stream channel will be restored.
- 9. Warning signs and a flagger(s) must be placed in advance of active operations or other equivalent protection must be used on roads to control traffic where hazardous conditions are created from forest activities as per OR-OSHA division 7 rules.
- 10. There are daily and seasonal restrictions in place on this sale.
- 11. Cleaning of equipment to eliminate noxious weed seeds is required prior to move-in of equipment onto federal lands.
- 12. There are lockable gates within the contract area.
- 13. Dust abatement may be required.
- 14. There are slash treatment and pile placement requirements in place for this sale (see SD-1 in the contract).
- 15. Purchaser should be aware there are logging residue reduction costs assessed under SD-5. Refer to the appraisal for total assessed costs of logging residue reduction.
- 16. The Purchaser may wet season haul, with the Authorized Officer's approval on the following roads: 33-3E-28.01 E1, 34-3E-09.00 A-F, 34-3E-09.02 A, 34-3E-09.03, 34-3E-12.00 A-C, 34-3E-12.01 A-B, 34-3E-12.03 A, 34-3E-13.00, 34-3E-19.03 A-B, 34-3E-29.01 A-E, and the FS 34 (Lodgepole Road). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul.

The Purchaser may wet season haul on these roads that will be rocked under Exhibit C work, with the Authorized Officer's approval on the following roads: 33-3E-31.08, 34-3E-05.00, 34-3E-05.01, 34-3E-07.03, 34-3E-09.02 B, and the 34-3E-18.00 C (M.P. 2.11 to M.P. 3.52). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul.

The Purchaser shall have the option to rock road numbers 33-3E-28.00 E2-F, 33-3E-31.01, 33-3E-31.02, 33-3E-31.03, 33-3E-31.05, 33-3E-31.07A, 33-3E-32.00, 33-3E-32.01, 33-3E-32.02 A1-A2, 34-2E-29.00 C, 34-3E-01.00 B, 34-3E-03.00 B, 34-3E-05.02, 34-3E-05.04, 34-3E-05.05, 34-3E-07.00, 34-3E-07.01, 34-3E-07.02, 34-3E-07.04, 34-3E-09.02 C, and the 34-3E-18.00 A-C (M.P. 0.00 to M.P. 2.11), for wet weather haul. Purchaser option rocking depths will be determined and approved by the Authorized Officer. 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 show in Exhibit C of this contract.

- 17. Purchaser should be aware that there are currently no wildlife related restrictions The following bullets could be applied if the species of concern is found within the distances listed to the contract area
 - No confirmed den sites are located within 50 feet of proposed treatment areas, however, if a confirmed fisher den site is found: Maintain ≥ 80 percent canopy cover within at least 50 feet of documented fisher natal and maternal dens. No activities may occur within stands. Maintain sufficient (at least 60%) canopy clover on a within-stand average basis. containing known fisher den sites from March 1 to July 30. Protect

fisher denning structures by retaining ≥ 24" diameter snags, down woody material, and live trees with cavities in the stand and if, for safety concerns, it is necessary to fall such snags or live trees with cavities, retain those cut trees or snags in the stand as additional down woody material. Do not apply vegetation treatments to all portions of the stand.

- Seasonally restrict timber harvest activities from March 1 to June 30 but may be extended up to September 30 if late nesting or nesting re-attempts are confirmed, within 0.25-mile of known active NSO sites or within 0.5-mile for helicopter operations and blasting. The seasonal restriction could be waived if non-nesting status is determined. If any new owls are discovered in harvest units following the sale date, activities would be halted until mitigation options are determined. Follow USFWS recommended noise disturbance distances for activities other than timber harvest to avoid disturbance to NSOs.
- Seasonally restrict prescribed burning and site preparation with chainsaws from March 1 to July 15 within 0.25-mile of known active NSO nests. The seasonal restriction could be waived if non-nesting status is determined.
- If a gray wolf den or rendezvous site is identified prior to or during project activities, implement a seasonal
 restriction from April 1 to July 15 and suspend project activities located within one mile of a known den or
 rendezvous site. Because these sites are difficult to locate and can change from year to year, this would
 be assessed on an ongoing basis throughout the life of this project through annual updates and
 communication with the USFWS and Oregon Department of Fish and Wildlife.

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

From the city of Medford take the Rogue Valley Express Way for 4.4 miles, turn left onto OR-62 and stay on it for 9.1 miles. Turn right on the Butte Falls Hwy and continue for 16 miles till you arrive in the Town of Butte Falls. Take a slight left onto fish lake road and continue for 0.6 miles. Turn left onto the Butte Falls -Prospect Road and continue for 10 miles. Turn left onto Vine Maple Mainline (34-3E-9.0 road) and continue for approximately 1.3 miles.

<u>ENVIRONMENTAL ASSESSMENT</u> -- Environmental Assessment (DOI-BLM-ORWA M050-2020-0001-EA) was prepared for this sale, and a Finding of No Significant Impact has been documented for the environmental assessment. These documents are available for inspection as background for this sale at the Medford District Office and online at the BLM e-planning 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. 41. TIMBER RESERVED FROM CUTTING - The following timber on the contract area is hereby reserved from cutting and removal under the terms of this contract and is retained as the property of Government.

- (A) <u>AR-1</u> All timber on the Reserve Area(s) as shown on Exhibit A and all orange painted and posted trees which are on or mark the boundaries of the Reserve Area(s).
- (B) <u>IR-1</u> Approximately eighteen thousand and fifty seven (18,057) trees marked with orange paint above and below stump height in all harvest units as shown on Exhibit A.
- (C) IR-2 All timber except approximately one thousand five hundred and thirty-one (1,531) trees marked for cutting heretofore by the Government with blue paint above and below stump height in units RVM 05, RVM 06, RVM 07, RVM 09, and RVM 31 (where RVM units overlap logging units tree are included in the cruise with the adjacent harvest unit and there will be no blue paint or reserve paint color in those RVM areas) as shown on Exhibit A.
- (D) <u>IR-5</u> All young growth conifers less than eight (8) inches in diameter D.B.H.O.B. not damaged in the normal course of logging in all units as shown on Exhibit A.
- (E) <u>IR-13</u> All dominant madrone, bigleaf maple and oak trees > 24 inches DBH in all units as shown on Exhibit A (which do not present a safety hazard as determined by the authorized officer). Trees felled for safety reasons shall be retained on site.
- (F) <u>IR-13</u> All snags in all units as shown on Exhibit A (which do not present a safety hazard as determined by the authorized officer). Snags felled for safety reasons shall be retained on site.
- (G) <u>IR-14</u> Within all commercial harvest units as shown on Exhibit A retain existing large down woody material >20 inches in diameter at the large end and >20 feet in length; and down woody material 6-20 inches in diameter at the large end and >20 feet in length in decay classes III, IV, and V (USDI 2016c, pp. 62-63).

Section 42

*** Addendum to Section 3(a)

Provided further; that in the case of contracts with a thirty-nine (39) month or longer term, the Purchaser shall also be required by the third anniversary date to either (i) pay no less than sixty (60) percent of the total estimated purchase price shown on Exhibit B or (ii) complete road construction required under the contract the value of which when combined with contract payments is equal to no less than sixty(60) percent of the total estimated purchase price shown on Exhibit B.

(A) Log Exports

- <u>LE-1</u> All timber sold to the Purchaser under the terms of the contract, except (1) 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 threequarters (8¾) inches in thickness or less; (6) shakes and shingles. Substitution will be determined under the definition found in 43 CFR 5400.0-5. 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. The purchaser shall also provide a current, interim Log Scale and Disposition of Timber Removed Report (Form 5460-15) upon request by the Authorized Officer at any time during the contract period for cutting and removal specified in Section 4 of this contract as amended. 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.

(B) Logging

- (1) <u>L-1</u> Before beginning operations on the contract area for the first time or after a shutdown of seven (7) days or more, 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 they intend to cease operations for any period of seven (7) or more days.
- (2) <u>L-2</u> Prior to the commencement of operations, the Purchaser shall obtain from the Authorized Officer written approval of a written operations and logging plan commensurate with the terms and conditions of the contract which shall include measures needed to assure protection of the environment and watershed. (A prework conference between the Purchaser's authorized representative and the Authorized Officer's representative must be held at a location designated by the

- Authorized Officer before the logging plan will be approved.) All logging shall be done in accordance with the plan.
- (3) <u>L-4</u> All trees designated for cutting shall be cut so that the resulting stumps shall not be lower than six (6) inches nor higher than twelve (12) inches measured from the ground on the uphill side of the tree. This height requirement may be reduced if approved by the Authorized Officer.
- (4) <u>L-7</u> In all ground based units shown on Exhibit A, all trees over twenty one (21) inches DBH designated for cutting shall be felled and cut into log lengths not to exceed forty-four (44) feet. before being yarded.
- (5) <u>L-7</u> In all cable units shown on Exhibit A, all trees designated for cutting shall be felled and cut into log lengths not to exceed forty-four (44) feet before being yarded.
- (6) <u>L-8</u> In all ground based units, as shown on Exhibit A, all trees twenty one (21) inches D.B.H.O.B. and smaller designated for cutting shall be felled and whole tree yarded or yarded with tops attached except when excessive stand damage occurs as determined by the Authorized Officer. If excessive stand damage occurs all logs shall be completely limbed and bucked into a max log length of forty four (44) feet prior to being yarded.
- (7) <u>L-10</u> In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of the unit boundary shall be felled way from the unit boundary. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (8) <u>L-10</u> In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of a private property line shall be felled away from the private property line. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (9) <u>L-10</u> In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of the corner monument shall be felled away from the corner monument. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (10) <u>L-10</u> In the contract area shown on Exhibit A, all trees designated for cutting which are within one hundred seventy five (175) feet of any plant site, or reserve area boundary as shown on Exhibit A shall be felled away from the painted and posted boundary. The Purchaser shall notify the Authorized Officer three (3) days before beginning felling operations in the above area(s).
- (11) <u>L-12</u> Yarding on the areas designated herein and shown on Exhibit A shall be done in accordance with the yarding requirements or limitations for the designated area.

Designated Area Yarding Requirements or Limitations

Ground
Based Units
(12-1, 12-2,
12-4, 13-2,
31-4, 31-6,
31-7, 32-1,
32-4, 5-1, 5
2, 5-5, 5-6,
7-1, 7-2, 7-
4)
'/

Mechanized felling equipment must have an arm capable of reaching at least twenty (20) feet.

No front-end loaders are permitted.

Yarding tractor width will not be greater than twelve (12) feet as measured from the outer edges of the standard width dozer blade in the straight position, or nine (9) feet as measured from the outer edges of standard width track shoes.

Yarding tractors will be equipped with integral arches capable of suspending one end of the log clear of the ground and winch systems capable of lining logs at least seventy five (75) feet.

One end suspension is required in all ground based units

No yarding up or down draw bottoms is permitted.

Incorporate existing skid trails and landings as a priority over creating new trails and landings where feasible, into a designated trail network for ground-based harvesting equipment.

Locate skid trails to minimize disturbance to down woody material. Where skid trails encounter large down woody material, a section would be bucked out for equipment access. The remainder would be left in place and would not be disturbed unless they pose a safety hazard.

Limit non-specialized skidders or tracked equipment to slopes generally less than 35%. In areas where it is necessary to exceed these gradients over short distances to access adjacent tractor area, use ridge tops where possible.

Limit the use of specialized ground-based mechanized equipment (those machines specifically designed to operate on slopes greater than 35%) to slopes less than 50%, except when using previously constructed skid trails or accessing isolated short skid trails over steeper pitches. Also, limit the use of this equipment when surface displacement creates trenches, depressions, excessive removal of organic horizons, or when disturbance would channel water and sediment as overland flow. Unit design would be determined based on specific equipment and operator capabilities and would be monitored during implementation by the Authorized Officer with input from the soil scientist and/or hydrologist.

The location of the tractor skid roads must be clearly designated on the ground, at locations approved by the Authorized Officer

Block skid trails to prevent public motorized vehicle use and other unauthorized use by October 15 of the year of harvest unless a waiver is in place for ground-based yarding to extend the dry season. Place woody debris or other appropriate barriers (e.g., rocks, logs, and slash) on the first 100 feet of skid trails leading

off system roads or landing areas in all ground-based yarding units upon completion of yarding to block and discourage unauthorized vehicle use. If there is not enough available slash to cover the first 100 feet of skid trails, apply seed and mulch to the area.

If operators are using feller-bunchers or cut-to-length harvesters off designated skid trails: Allow mechanized equipment capable of creating and walking on slash (such as a cut-to-length system) to work off designated skid trails for one or two passes on at least eight inches of slash and under dry soil conditions (less than 25% soil moisture content. The Authorized Officer, with input from the soil scientist, can provide waiver for soil moisture if minimal soil disturbance is expected to occur due to site conditions. Allow mechanized equipment (feller-buncher systems) to work off designated skid trails during the dry season (soil moisture content less than 20%) for one or two passes only (one round-trip). The BLM may issue a waiver of the soil moisture if minimal soil disturbance would occur based on site conditions. Use low, ground-pressure equipment off designated skid trails. Restrict all other use of ground-based equipment to designated skid trails. Stop equipment use off designated skid trails if logging equipment is causing soil disturbance above a Class 1 (Page-Dumroese, Abbott, Rice 2009, p. 6, 14, 15, and 27-33), or as determined by the Authorized Officer.

Landing location must be approved by the authorized officer.

Limit landings to 0.5-acre or less for tractor.

In upland units, allow harvesting operations (cutting and transporting logs) when ground is frozen or adequate snow cover exists to prevent soil compaction and displacement. The Authorized Officer would consult with a watershed specialist (hydrologist, soils scientist, or fisheries biologist) to determine appropriate conditions. If conditions change during operations where detrimental soil compaction and displacement is occurring, operations would be stopped immediately.

During logging or forest management operations, use techniques, such as directional falling, to prevent damage to fences, cattle guards, livestock watering troughs and other improvements. If damage to range improvements does occur, the BLM shall be notified immediately, and proper repair or replacement would occur within two weeks. Proper repair of fences and gates includes keeping wire properly attached to posts, splicing or replacing broken wire in kind, repairing structures such as corners, stress panels or gates, and any other work necessary to keep improvements functional. Repair of structures such as stress or corner panels and gates requires pre-approval by BLM staff. Repair or cleaning of cattle guards damaged or filled with sediment by logging activities would require approval of BLM road engineering staff for structural integrity and public safety compliance.

	During logging and forest management activities, operators shall keep all gates closed and all livestock containment systems functional to keep livestock in authorized areas.
	Minimize the area where more than half of the depth of the organically enriched upper horizon (topsoil) is removed when conducting forest management operations.
	Any infrastructure impacted by logging or road operations (trails, service roads, kiosks, fences etc.) would be restored to their conditions as it was prior to logging operations.
	All trees over 40 inches DBH with a birthdate prior to 1850 felled for skid trails or safety reasons must be felled, bucked, and removed to an area adjacent to and outside of the skid trail ROW. Where trees are bucked at the large ends, the purchaser shall put a "X" of paint with a color approved by the authorized officer These trees/logs shall not be yarded to the landing.
32-1 (Ground Based)	31-10/32-4B shall be yarded before 32-1 to insure adequate guyline anchors remain
,	Predesignated landings within riparian outer zone shall be used and no other landings along Vine Maple Mainline (34-3E-9.0) will be allowed.
7-2 (Ground Based)	Where trees are cut for yarding corridors, skid trails, landings, road construction, maintenance, and improvement in the Inner Zone or Middle Zone, retain cut trees in adjacent stands as down woody material or move cut trees for placement in streams for fish habitat restoration, at the discretion of the BLM. In the Outer Zone, retain cut trees in adjacent stands as down woody material, move cut trees for placement in streams for fish habitat restoration, or sell trees, at the discretion of the BLM.
	At the predesignated skid trail stream crossing, stage bales of mulch under the crossing in the channel to capture any displaced soil. Once logging is completed remove the existing 8-inch culvert and pull back the slopes to restore the original stream channel. Remove all excess dirt created from the culvert removal and channel restoration by drifting the soil to place in a stable location or by piling it in stable location to block the skid trail as approved by the authorized officer. Seed and mulch all disturbed areas at the stream crossing and spoils pile location.
31-6 (Ground Based)	Minimize the number of draw crossings when yarding to the road below the unit.

32-4 (Ground Based)	Predesignated landing within riparian outer zone shall be used and no other landings along South Fork Vine Maple Creek Road (33-3E-32.0) will be allowed.
32-4 (Special Yarding	Endline/bull line trees/logs to skid trail above the tagged special yarding area.
Area)	Predesignated landing within riparian outer zone shall be used and no other landings along South Fork Vine Maple Creek Road (33-3E-32.0) will be allowed.
Cable Units (31-10, 31-5, 32-4B, 7-3, 7-4)	Prior to marking or falling any timber in the unit, all yarding corridors, tail/lift trees and/or intermediate support trees shall be identified by the purchaser and approved by the Authorized Officer.
	No yarding up or down draw bottoms is permitted.
	Limit landings to 0.5-acre or less for cable.
	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.
	Bucked logs will be completely delimbed prior to being yarded.
	Use full or partial suspension when skyline-cable yarding. Require full suspension over flowing streams, non-flowing streams with highly erodible beds and banks, and jurisdictional wetlands.
	Prevent streambank and hillslope disturbance on steep slopes (generally >60%) by requiring full suspension within 50 feet of definable stream channels. Yard the remaining areas across the RR using at least one-end suspension.
	Limit the width of skyline corridors to be as narrow as operationally feasible; do not exceed a 15-foot width. As practicable, set corridor spacing where they cross the streams to no less than 100 feet apart when physical, topography, or operational constraints demand, with an overall desire to keep an average spacing of 200 feet apart. If possible, use natural openings or areas with non-commercial sized trees when selecting corridor locations that cross a riparian area.
	Seed and mulch the top 20 feet of skyline-cable yarding corridors where yarding logs to the road results in extended soil exposure.
	All trees over 40 inches DBH with a birthdate prior to 1850 felled for cable corridors or safety reasons must be felled and left on site. Where trees are bucked at the large ends, the purchaser shall put a

	"X" of paint with a color approved by the authorized officer These trees/logs shall not be yarded to the landing.
31-10/32-4B (Cable)	Haul-back is required.
	Bucked logs from 32-4B shall be cable yarded to the road above unit 31-10. This will require a cable corridor through the riparian that separates both units and yarding over Vine Maple Mainline 34-3E-9.0 road. While yarding over the road OR OSHA Division 7 regulations on flagging and signs shall be followed.
	Guyline anchors are minimal in either size or numbers of anchors available in parts of the unit. Refer to OR OSHA Division 7 regulations on anchoring for suitable practices.
	Where trees are cut for yarding corridors, skid trails, landings, road construction, maintenance, and improvement in the Inner Zone or Middle Zone, retain cut trees in adjacent stands as down woody material or move cut trees for placement in streams for fish habitat restoration, at the discretion of the BLM. In the Outer Zone, retain cut trees in adjacent stands as down woody material, move cut trees for placement in streams for fish habitat restoration, or sell trees, at the discretion of the BLM.
7-3 (Cable)	Where trees are cut for yarding corridors, skid trails, landings, road construction, maintenance, and improvement in the Inner Zone or Middle Zone, retain cut trees in adjacent stands as down woody material or move cut trees for placement in streams for fish habitat restoration, at the discretion of the BLM. In the Outer Zone, retain cut trees in adjacent stands as down woody material, move cut trees for placement in streams for fish habitat restoration, or sell trees, at the discretion of the BLM.
7-4 (Cable)	For special yarding draw shown as shown on Exhibit A maps, crib draw with logs where cable corridor crosses it to protect the draw while yarding. When yarding has been completed remove the logs from the draw.
31-5 (Cable)	Will require a machine capable of cable yarding without guylines or will require machine, deadman or log deck anchors for part of the harvest unit due to lack of suitable guyline anchors.
Roadside Vegetation Maintenance Units	Mechanized logging equipment shall be restricted to the existing roads where clearing is to occur.

(12) <u>L-14</u> No falling, yarding or loading is permitted in or through the timber reserve area as shown in Exhibit A and as posted (unless otherwise approved by the Authorized officer).

- (13) <u>L-17</u> Landings shown on new road construction shall be placed at the approximate location(s) as shown on Exhibit A. Any alternative landing sites must be approved by the Contracting Officer in the written operations and logging plan.
- (14) L-19 No road construction, landing construction, skid trail construction, skid trail blocking, road renovation, road reconstruction, road decommissioning, road blocking/barricade construction, rocking, water bar construction, soil ripping, shall be conducted within contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive, or when soil moisture exceeds 25% as directed by the contracting officer.
- (15) <u>L-19</u> No ground-based yarding and soil decompaction operations shall be conducted within contract area between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive, or when soil moisture exceeds 25% as directed by the contracting officer.
- (16) <u>L-19</u> No seeding and mulching shall be conducted within contract area between April 1 thru August 31 of the same calendar year and November 1 of one calendar year and January 31 of the following calendar year, both days inclusive.
- L-19 No landing operations, rock haul and log haul between October 15 of one calendar year and May 15 of the following calendar year, both days inclusive. If roads (33-3E-28.01 E1, 34-3E-09.00 A-F, 34-3E-09.02 A, 34-3E-09.03, 34-3E-12.00 A-C, 34-3E-12.01 A-B, 34-3E-12.03 A, 34-3E-13.00, 34-3E-19.03 A-B, 3E-29.01 A-E, and the FS 34 (Lodgepole Road). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul. The Purchaser may wet season haul on these roads that will be rocked under Exhibit C work, with the Authorized Officer's approval on the following roads: 33-3E-31.08, 34-3E-05.00, 34-3E-05.01, 34-3E-07.03, 34-3E-09.02 B, and the 34-3E-18.00 C (M.P. 2.11 to M.P. 3.52). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul.

The Purchaser shall have the option to rock road numbers 33-3E-28.00 E2-F, 33-3E-31.01, 33-3E-31.02, 33-3E-31.03, 33-3E-31.05, 33-3E-31.07A, 33-3E-32.00, 33-3E-32.01, 33-3E-32.02 A1-A2, 34-2E-29.00 C, 34-3E-01.00 B, 34-3E-03.00 B, 34-3E-05.02, 34-3E-05.04, 34-3E-05.05, 34-3E-07.00, 34-3E-07.01, 34-3E-07.02, 34-3E-07.04, 34-3E-09.02 C, and the 34-3E-18.00 A-C (M.P. 0.00 to M.P. 2.11), for wet weather haul. Purchaser option rocking depths will be determined and approved by the Authorized Officer. 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 show in Exhibit C of this contract. If roads are determined to have adequate surfacing or adequate rock is added as determined by the Contracting Officer, landing operations, rock haul and log haul will be allowed.

- (18) <u>L-24</u> Before cutting and removing any trees necessary to facilitate logging in units 5-1, 5-2, 5-5, 5-6, 31-4, 31-5, 31-6, 31-10, and 32-1 as shown on Exhibit A, the Purchaser shall identify the location of 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 the following conditions must be met:
 - (a) All skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees 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 Authorized Officer, the width of each skid road shall be limited to twelve (12) feet, and cable yarding roads shall be limited to fifteen (15) feet.
 - (b) The Purchaser may immediately cut and remove additional timber to clear skid roads, cable yarding roads, and tailhold, tieback, guyline, lift, intermediate support, and danger trees when the trees have been marked with green 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 Sec. 3.(b) of the contract or sufficient bonding has been provided in accordance with Sec. 3.(e). 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 Sec. 9 of the contract; or, the Authorized Officer determines that all trees otherwise reserved in section 41 of the contract or any tree that exceeds 28 inches diameter at breast height shall be appraised and sold by bilateral modification of the contract at current fair market value in accordance with Sec. 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 Sec. 8 or Sec. 9 of the contract as determined by the Authorized Officer in accordance with this provision. The Contracting Officer may issue a written order to the Purchaser to suspend, delay, or interrupt any or all contract work for the period of time deemed necessary and appropriate for the Government to safely measure and mark additional timber.
- (f) The Government may reserve trees previously designated for cutting and removal by applying orange paint or blacking out blue 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 prescription(s). 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.
- (19) <u>L-29</u> In accordance with the requirements of Sec. 8 of the contract it has been determined that it is in the best interest of the Government and within the provisions of 43 CFR 5402.0-6 to sell additional timber located in unit 7-1, 7-2, 7-3, 7-4, 7-5 12-1, 12-2, 12-3, 12-4, 13-2, 31-7, 32-4 and 32-4B as shown on Exhibit A, which is obstructing needed cable yarding roads, ground based yarding skid roads, hazardous to workers, needed for guyline, tailhold, and/or tieback trees, or severely damaged from the normal conduct of felling or yarding operations to meet all applicable State safety laws, codes or regulations. This timber must be cut or removed so that the Purchaser can continue active falling and yarding operations. The Purchaser is, therefore, authorized to cut and remove such additional timber in accordance with the provisions of Section 8 of the contract: provided, however, that:
 - (a) Trees reserved for the tree improvement program and trees reserved for the wildlife habitat objectives under Sec. 41 of the contract are not included in the authorization.
 - (b) The Purchaser shall identify each tree sold and cut in accordance with the provision by marking the cut surface of the stump immediately after falling with a large "X". The "X" shall be cut with a chain saw. The stump shall be marked by hanging red fluorescent flagging near the stump so that the stump can be visually located from a distance of not less than one hundred (100) feet.
 - (c) The volume and price for such timber shall be determined by the Authorized Officer in accordance with Bureau of Land Management

prescribed procedures and paid for by the Purchaser in accordance with Sec. 3(b) of the contract as required by Sec. 8 of the contract.

- (d) No timber may be cut or removed under the terms of this provision if all contract payments required by Sec. 3(a) or 3(c) of the contract have been made.
- (e) The permission to cut and remove additional timber contained in this provision may be withdrawn by the Contracting Officer if the Authorized Officer determines that the Purchaser:
 - 1. Failed to properly mark any stump with the "X" cut.
 - 2. Failed to identify the location of any stump.
 - 3. Cut any tree that was reserved for tree improvement and/or wildlife habitat.
 - 4. Cut any tree in or adjacent to cable yarding corridors that was not necessary to facilitate cable yarding.
 - 5. Cut any reserve tree in or adjacent to tractor skid roads that was not necessary to facilitate ground based yarding.
 - 6. Failed to properly segregate any pulled over tree that was yarded to the landing.
 - 7. Cut any reserve tree that was not severely (as defined during the prework conference and documented in the approved logging plan) damaged from felling and yarding operations.
 - 8. Cut more than the minimum number of trees necessary to properly serve as guyline anchor stumps.
 - 9. Cut or topped more than the minimum number of trees necessary to properly serve as tailhold trees.
 - 10. Cut more than the minimum number of trees necessary to properly serve as tie-backs for topped tailhold trees.
 - 11. Failed to maintain accurate and current (no more than 24 hours old) documentation of cut and removed timber.

If the permission to cut and remove additional timber provision is withdrawn, the Authorized Officer shall deliver to the Purchaser a written notice that additional sale of timber under this special provision is no longer approved.

If the permission to cut and remove additional timber provision is withdrawn, the Purchaser shall inform the Authorized Officer at least two working days prior to the need for cutting and yarding any guyline tree, tailhold tree, tie-back tree, danger tree, corridor tree, pulled over tree, and severely damaged tree. All sales of additional timber shall comply with Section 8 of the contract.

The Contracting Officer may order the Purchaser, in writing, to suspend, delay, or interrupt all or any part of the work of this contract for the period of time that the Contracting Officer determines appropriate for the Government to safely measure and mark additional timber.

All cable-yarding and ground based equipment skid roads upon which timber may be cut and removed in accordance with this special provision must be needed for the removal of timber sold under this contact and shall be limited to the narrowest width necessary for the yarding of logs with minimum damage to reserved trees. The Purchaser shall be liable for damages in accordance with Sec. 13 of the contract for any reserved timber cut or removed in violation of the terms of this special provision.

- (20) <u>L-32</u> In ROW 31, where new road construction is required for logging access as shown on exhibit A, Purchaser shall during road construction fell, buck, and remove to an area adjacent to and outside of the road right-of-way five (5) trees marked with blue "C/L" which are greater than or equal to forty (40) inch diameter at breast height and a birthdate prior to 1850. Where trees are bucked at the large ends, the purchaser shall put a "X" of paint with a color approved by the authorized officer to ensure that the logs are not yarded and shipped. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.
- (21) <u>L-32</u> In ROW 5, where new road construction is required for logging access as shown on exhibit A, Purchaser shall during road construction fell, buck, and remove to an area adjacent to and outside of the road right-of-way one (1) trees marked with blue "C/L" which are greater than or equal to forty (40) inch diameter at breast height and a birthdate prior to 1850. Where trees are bucked at the large ends, the purchaser shall put a "X" of paint with a color approved by the authorized officer to ensure that the logs are not yarded and shipped. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.
- (22) <u>L-32</u> In ROW for the predesignated landing in 32-4B, where it is within the riparian zone as shown on exhibit A, Purchaser shall during landing construction fell, buck, and remove to an area adjacent to and outside of the landing right-of-way fourteen (14) trees marked with blue "C/L" which are within the inner zone of the riparian. Where trees are bucked at the large ends, the purchaser shall put a "X" of paint with a color approved by the authorized officer to ensure that the logs are not yarded and shipped. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.
- (23) <u>L-32</u> In Unit 7-2 where predesignated skid trail crosses the riparian as shown on exhibit A, the Purchaser shall during skid trail construction fell, buck, and remove all trees within the riparian zone needed for the skid trail ROW to an area adjacent to and outside of the skid trail right-of-way. Where trees are bucked at the large ends, the purchaser shall put a "X" of paint with a color approved by the authorized officer to ensure that the logs are not yarded and shipped. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.

- (24) <u>L-32</u> In Unit 7-3 where yarding corridors may cross the riparian as shown on exhibit A, the Purchaser shall during corridor clearing fell and leave trees on site within the riparian zone. No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.
- (25) <u>L-32</u> In Unit 31-10/32-4B where yarding corridors may cross the riparian as shown on exhibit A, the Purchaser shall during corridor clearing fell and leave trees on site within the inner riparian zone (buffer flagged with green and white candy stripe). No adjustments of volume or value shall be made to meet these requirements. The Purchaser shall tally all trees by diameter class and species on a daily basis. The tally may be requested by the Authorized Officer at any time during falling operations. At the end of falling operations a completed tree tally shall be submitted to the Authorized Officer.
- (26) 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.

(C) ROAD CONSTRUCTION, MAINTENANCE, AND USE (R)

(1) <u>R-1</u>: 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 15-1, 15-2a, and 15-2b 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 station 0 +00 to station 22+87 of Road No. 33-3E-31.08 as shown on Exhibit C-17 and from station 0+00 to station 7+37 of Road No. 33-3E-32.02 B, 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 D-2 for the removal of Government timber sold under the terms of this contract and/or the hauling of rock as required in Exhibit C, provided that the Purchaser pay the required maintenance and rockwear obligations described in Section 42 (C)(7). Any road listed on Exhibit D-2 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
33-3E-28.00 E1	0.70	BLM	AGG	BLM
33-3E-28.00 E2	0.65	BLM	AGG	BLM
33-3E-28.00 F	0.90	JHLIC	AGG	BLM
33-3E-31.01	0.57	BLM	AGG	Purchaser
33-3E-31.02	0.37	BLM	AGG	Purchaser
33-3E-31.03	0.60	BLM	AGG	Purchaser
33-3E-31.05	0.56	BLM	NAT	Purchaser
33-3E-31.07	0.13	JHLIC	AGG	Purchaser
33-3E-31.08	0.43	BLM	AGG	Purchaser
33-3E-32.00	0.70	BLM	AGG	Purchaser
33-3E-32.01	0.61	Silver Butte	AGG	Purchaser
33-3E-32.02 A1	0.07	BLM	AGG	Purchaser

33-3E-32.02 A2	0.21	BLM	NAT	Purchaser
33-3E-32.02 B	0.14	BLM	NAT	Purchaser
34-2E-29.00 C	0.54	BLM	AGG	BLM
34-3E-01.00 B	0.02	BLM	AGG	BLM
34-3E-03.00 B	0.02	BLM	AGG	Purchaser
34-3E-05.00	0.55	BLM	AGG	BLM
34-3E-05.01	0.31	BLM	AGG	BLM
34-3E-05.02	0.32	BLM	NAT	Purchaser
34-3E-05.04	0.66	BLM	NAT	Purchaser
34-3E-05.05	0.07	Silver Butte	AGG	Purchaser
34-3E-07.00	0.73	BLM	AGG	BLM
34-3E-07.01	1.40	BLM	AGG	Purchaser
34-3E-07.02	0.68	BLM	AGG	Purchaser
34-3E-07.03	0.43	BLM	AGG	Purchaser
34-3E-07.04	0.40	BLM	AGG	Purchaser
34-3E-09.00 A-B	0.64	BLM	AGG	BLM
34-3E-09.00 C-D	0.72	JHLIC	AGG	BLM
34-3E-09.00 E-F	2.64	BLM	AGG	BLM
34-3E-09.02 A	0.02	BLM	AGG	Purchaser
34-3E-09.02 B	0.35	BLM	AGG	BLM
34-3E-09.02 C	0.45	BLM	NAT	Purchaser
34-3E-09.03 A	0.08	BLM	AGG	Purchaser
34-3E-12.00 A	0.13	BLM	AGG	BLM
34-3E-12.00 B	0.43	Juniper	AGG	BLM
34-3E-12.00 C	1.11	BLM	AGG	BLM
34-3E-12.01 A-B	1.25	BLM	AGG	BLM
34-3E-12.03 A	0.69	BLM	AGG	BLM
34-3E-13.00	0.15	BLM	AGG	BLM
L	1	I	I	1

34-3E-18.00 A	0.16	Siskiyou	AGG	BLM
34-3E-18.00 B-C	3.36	BLM	AGG	BLM
34-3E-19.03 A-B	1.72	Siskiyou	AGG	BLM
34-3E-29.01 A	0.63	BLM	AGG	BLM
34-3E-29.01 B	0.28	JHLIC	AGG	BLM
34-3E-29.01 C	0.15	BLM	AGG	BLM
34-3E-29.01 D	0.27	JHLIC	AGG	BLM
34-3E-29.01 E	0.45	BLM	AGG	BLM
FS 34	2.43	FS	BST	Purchaser
Temp Road 31-5	0.18	BLM	NAT	Purchaser
Temp Road 32-1	0.24	BLM	NAT	Purchaser

- (6) R-2a: With the prior written approval of the Authorized Officer, the Purchaser may arrange for cooperative maintenance with other users of road(s) included in Section 42(C)(8) 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-2b: The Purchaser shall pay the Government a road maintenance and rockwear fee of Fifty five thousand eight hundred thirty five and 42/100 dollars (\$55,835.42) for the transportation of timber included in this contract price over said roads. The above maintenance amount is for the use of 31.30 miles of road or less. If the total road maintenance and rockwear fee does not exceed five hundred and no/100 dollars (\$500.00), the Purchaser shall pay such amount in full prior to use of such roads. If the total road maintenance and rockwear fee exceeds five hundred and no/100 dollars (\$500.00), the Authorized Officer shall establish an installment schedule of payments of the maintenance and rockwear obligations.
- (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 road(s) 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 road(s) listed in Section 42(C)(4). 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. The Purchaser shall perform any required road repair and maintenance work on roads used by them, under the terms of Exhibit D, Road Maintenance Specifications, of this contract, which is attached hereto and made a part hereof.
- (10) <u>R-3</u>: In the use of Road Nos. 33-3E-32.01 and 34-3E-05.05, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No M-2000C, between the United States of America and Silver Butte Timber Company. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Payment of a road rockwear obligation of **two hundred twenty four and 42/100 dollars** (\$224.42) to Silver Butte Timber Company, payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (11) R-3: In the use of Road No. 34-3E-12.00 B, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000D, between the United States of America and Juniper Properties LLC. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Placement and compaction of 20 CY of aggregate conforming to Exhibit C-11, Section 1200 (Gradation C-1) or existing BLM stockpiled ¾" minus aggregate on the Juniper Properties owned 34-3E-12.00 B road in lieu of paying rockwear fees as indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.

(12) R-3: In the use of Road Nos. 33-3E-28.00 F, 33-3E-31.07 A, 34-3E-09.00 C-D, 34-3E-29.01 B, and the 34-3E-29.01 D, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No M-2000E, between the United States of America and John Hancock Life Insurance Company. This document is available for inspection at the Medford District Office.

These conditions include:

- (a) Payment of a road rockwear obligation of **five thousand three hundred fifty eight and 28/100 dollars (\$5,358.28)** to John Hancock Life Insurance Company, payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (13) R-3: In the use of Road Nos. 34-3E-18.00 A and 34-3E-34-3E-19.03 A-B, the Purchaser shall comply with the conditions of Right-of-Way and Road Use Agreement No. M-2000F, between the United States of America and Siskiyou Timberlands, LLC. This document is available for inspection at the Medford District Office.

These conditions include:

- Payment of a road rockwear obligation of **two thousand three hundred eighty six and 61/100 dollars (\$2,386.61)** to Siskiyou Timberlands, LLC., payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (14) R-3a: In the use of Road No. FS 34, the Purchaser shall comply with the conditions of the Bureau of Land Management and Forest Service Interagency Right-of-Way and Road Use Agreement No. dated May 20, 1980, and Exhibit A.

These conditions include:

- (a) Payment of a road surface replacement obligation of **eight hundred six** and 36/100 dollars (\$806.36) to the Forest Service, payable at the time indicated in the License Agreement.
- (b) Prior to the use of said roads, the Purchaser shall furnish the Authorized Officer a properly signed copy of the executed License Agreement.
- (c) Default by the Purchaser of said Right-of-Way and Road Use Agreement, or any License Agreement executed pursuant thereto, for failure to pay appropriate road use fees shall be considered a violation of this contract. The amount of unpaid fees shall be considered as the amount of damage suffered by the Government as a result of the violation of this provision.
- (d) Road maintenance and haul by the Purchaser in accordance with specifications set forth in the USFS Standard Road Maintenance Specifications for the Pacific Northwest Region and Commercial Road Use Rules and Road Use Permit Requirements (Rogue River Siskiyou National Forest August 2012).
- (e) Purchaser shall have a pre-maintenance/pre-haul meeting with the Forest Service prior to beginning operations on Forest Service roads.
- (15) 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, 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.
- (16) 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.

(17) <u>R-5:</u> 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.

(D) Environmental Protection

- (1)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 for all hazardous substances to be used in the contract area. Such plan shall include identification of Purchaser's representatives responsible for supervising initial containment action for releases and subsequent cleanup. In addition, such plan shall follow all applicable State of Oregon Department of Environmental Quality guidelines for spill prevention and containment of petroleum products (Oregon Administrative Rules, Chapter 340, Department of Environmental Quality, Division 142, Oil and Hazardous Materials Emergency Response Requirements). During operations the operator would be required to have a BLM-approved spill plan or other applicable contingency plan. In the event of any release of oil or hazardous substance, as defined in Oregon Administrative Rules (OAR) 340-142-0005 (9)(d) and (15), into the soil, water, or air, the operator would immediately implement the site's plan. As part of the plan, the operator would be required to have spill containment kits present on the site during operations. The operator would be required to be in compliance with OAR 629-605-0130 of the Forest Practices Act, Compliance with the Rules and Regulations of the Department of Environmental Quality. Notification, removal, transport, and disposal of oil, hazardous substances, and hazardous wastes would be accomplished in accordance with OAR 340-142, Oil and Hazardous Materials Emergency Response Requirements, contained in Oregon Department of Environmental Quality regulations (SP-05, SP-06, and SP-07).
- (2) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall store all hazardous materials and petroleum products in durable containers placed outside of Riparian Reserves. Locate so an accidental spill would be contained nor drain into any stream system (SP-03).

Refuel equipment a minimum of 175 feet from streams, ponds, or other wet areas. Store equipment containing reportable quantities of toxic fluids outside of the

- Riparian Reserve. Hydraulic fluid and fuel lines would be in proper working condition in order to minimize leakage into streams (SP-03).
- (3) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall restrict ground-based yarding and soil decompaction operations from October 15 to May 15 generally, or when soil moisture exceeds 25%. The Authorized Officer may issue a waiver, with support from the BLM soil scientist and based on site conditions.
- (4) E-1 In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall comply with the following. Road renovation and improvement would occur during the dry season (May 15 to October 15). Variations in these dates would be permitted dependent upon weather and soil moisture conditions and with a specific erosion control plan (e.g., rocking, waterbarring, seeding, mulching, barricading) as determined by the Authorized Officer in consultation with aquatic and/or soils scientists. All road and landing construction activities would be stopped when a storm event resulted in degrading conditions as evidenced by turbid runoff, turbid ditch flow, ponding, or rutting or other displacement in excess of two inches. Watershed specialists would closely monitor storms that result in precipitation and would convey pertinent information to the Authorized Officer. Similarly, the Authorized Officer would convey road, landing, and ditch conditions to the aquatic and/or soil specialists.
- (5) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall construct road barricades as specified on Exhibit C, at locations where an existing barricade has been removed to provide for harvest access. Barricades shall be in place by October 15 of each calendar year.
- (6) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall block skid trails to prevent public motorized vehicle use and other unauthorized use by October 15 of the year of harvest unless a waiver is in place for ground-based yarding to extend the dry season. Place woody debris or other appropriate barriers (e.g., rocks, logs, and slash) on the first 100 feet of skid trails leading off system roads or landing areas in all ground-based yarding units upon completion of yarding to block and discourage unauthorized vehicle use. If there is not enough available slash to cover the first 100 feet of skid trails, apply seed and mulch to the area.
- (7) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall revegetate disturbed soils with locally adapted native seeds and plant materials as prescribed by the field office botanist, and mulch. Need would be determined by the authorized officer in consultation with the field office botanist, based on the level of disturbance and the presence of priority non-native invasive plants. Planting and/or seeding would occur between September 1 to October 31, or February 1 to March 31 or as otherwise approved by authorized officer in consultation with the field office botanist.

The Purchaser shall furnish the specific seed mixture prescribed by the Authorized Officer, which will include up to 3 grasses and 2 forbs from the following list, but may include substitutions approved by the Authorized Officer: Grasses: Achnatherum lemmonii, Bromus carinatus, Brumus vulgaris, Elymus glaucus, Festuca californica, Festuca roemeri, Koeleria macrantha, Poa secunda, Vulpia microstachys

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

The proportion of each species in the mixture shall be prescribed by the Authorized Officer.

The Purchaser shall apply prescribed seed and straw mulch to acres designated for treatment, as directed by the Authorized Officer, at the following rates of application:

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

Straw mulch 1000 lbs/acre

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

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

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

Furnished seed shall meet the minimum requirements for either Yellow Tag Source Identified Seed or Blue Tag Certified Class Seed, as defined by the Association of Official Seed Certifying Agencies. Seed source shall be approved by the Authorized Officer and shall be from the EPA Level III Ecoregion in which the project occurs. For each lot of seed, the Purchaser shall furnish the Authorized Officer a Seed Test result from a certified seed testing lab (e.g., Oregon State University), which shall include: test date; lot number; seed source; and results of test for purity, germination, and weed content. All seed lots must have been tested within the previous 12 months to be accepted. Seed that has become wet, moldy, or otherwise damaged shall not be accepted. Seed must be available to the Authorized Officer for inspection at least 5 days in advance of commencing revegetation work.

- (8) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall ensure hay, straw, and mulch are certified as free of prohibited noxious vegetative parts or seeds, per 75 FR 159:51101-02. Hay must be from native grasses only. Straw or hay must be obtained from the BLM or purchased from growers certified by the Oregon Department of Agriculture's Weed Free Forage and Mulch Program or approved by the project botanist.
- (9) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall apply erosion-control techniques (e.g. water bar, seed, mulch, scatter chipped material, or scatter limbs and other fine material) on skid trails, forwarder trails, yarding corridors, landings, and other disturbed areas where potential for soil erosion or delivery to waterbodies, floodplains, and wetlands exist, or as identified by the Authorized Officer.

- (10) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall de-compact landings and heavily compacted skid trails in regeneration units. Depth needed to be ripped would be dependent on how deep the compaction layer is and would be site-specific.
- (11) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall decompact (using equipment approved by Authorized Officer) and water bar all temporary routes and associated landings, and roads identified for full decommissioning to a depth of 18 inches or bedrock (whichever is shallower). Avoid subsoiling areas near tree roots and where there are rocks larger than 2 feet across. Apply seed and mulch and block upon completion of use. Seeding and mulching would occur in the same operational season that construction activities.
- (12) <u>E-1</u> In addition to the requirement set forth in Sec. 26 of this contract, the Purchaser shall seed and mulch the top 20 feet of skyline-cable yarding corridors where yarding logs to the road results in extended soil exposure.
- (13) <u>E-2</u> The water bars to be constructed as required by Sec. 26(c) shall be constructed in accordance with the specifications shown on Exhibit C Package (special provisions), which is attached hereto and made a part hereof.
 - (a) Water-bar all pre-designated skid trails, designated skid trails, and forwarder trails used for logging activities in all ground based units shown on Exhibit A., at locations approved by the authorized officer, by October 15 of the year of harvest.
 - (b) Install water-bars at the same time as subsoiling (if both are required) unless skid trails are needed to complete harvest the following season. In that case, water bars would be constructed and straw would be applied to exposed soil prior to fall rains to reduce sedimentation during winter months. Water-bar spacing on tractor skid trails would be based on the RMP erosion-control measures for timber harvest, which considers slope and soil series.
- (13) <u>E-3</u> 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.
- (15) <u>E-5</u> 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 owls may not be allowed during this time period.
- (16) <u>E-7</u> In order to prevent the spread of noxious weeds (and Phythophthora lateralis), the Purchaser shall (steam clean or pressure wash) all equipment traveling off system roads or temporary routes prior to entry onto BLM lands (and between sale locations if operating in areas infested with weeds.) as directed by the Authorized Officer. Cleaning shall be defined as removal of all dirt, grease, plant parts and material that may carry noxious weed seeds.

(E) Miscellaneous

(1) M-2 The Government at its option may check scale any portion of the timber removed from the contract area. The Purchaser hereby agrees to make such contract timber available for scaling at a location designated by the Authorized Officer. In the event that BLM elects to check scale and if such check scaling causes a delay in log transportation time, an adjustment will be made to the purchase price as follows. If the entire sale is check scaled, the purchase price of this contract shall be reduced by fourteen hundred thirty two dollars and fifty cents (\$1,432.50). In the event that only a portion of the contract timber is scaled, the purchase price shall be reduced by that portion of \$0.75 per net thousand board foot of timber scaled which is equal to the percentage of timber sold which was actually scaled by the Government. For purposes of computing this price reduction, the percentage of timber sold which has been scaled shall be determined by the Government. Any reduction in purchase price under the terms of this provision shall be full compensation to the Purchaser for any expense or loss incurred as a result of such scaling.

(F) Fire Prevention and Control

- (1) <u>F-1a Fire Prevention and Control</u>. Primarily for purposes of fire prevention and control, the Purchaser shall comply with the following provisions:
 - (a) Prior to the operation of power driven equipment in construction or logging operations under this contract during the closed fire season or periods of fire danger, the purchaser shall ensure that planned operations will be in full compliance with the current Fire Season Requirements issued by the State of Oregon, Department of Forestry and the Medford District Bureau of Land Management.

Current State of Oregon, Department of Forestry requirements can be found online at: https://www.oregon.gov/ODF/Fire/Pages/Restrictions.aspx

(G) Slash Disposal and Site Preparation

(1) <u>SD-4 Logging Residue Reduction</u>. In addition to the requirements of Sect.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 logging residue reduction and site preparation measure(s) required by this contract:

Prior to commencement of any operation under this section of the contract, a slash disposal and site preparation pre-work conference between the purchaser's representative and the Authorized Officer must be held at a location designated by the Authorized Officer. All slash disposal and site preparation shall be done in accordance with the plans developed at this pre-work conference.

Slash, as defined for this section, shall mean all material (brush, limbs, tops, unmerchantable stems, and chunks) severed or knocked over as a result of purchasers operations under the terms of this contract, including material cut during slashing activities for the purposes of fuels reduction.

Refueling of chainsaws and other equipment will be done no closer than one hundred fifty (150) feet of any stream or wet area. Spilled fuel and oil would be cleaned-up and would be disposed of at an approved disposal site.

- (2) For Igniting, Burning, Mop-up of Piles on Units:
 - (a) One work leader(s) Firefighter Type 1 (FFT1) qualified according to National Wildfire Coordinating Group (NWCG) Wildland Fire Qualifications System guide, PMS 310-1) to supervise crew and equipment operations, and to serve as Purchaser's representative.
 - (b) Two-person crew Firefighter Type 2 (FFT2) qualified according to National Wildfire Coordination Group (NWCG) Wildland Fire Qualifications System guide, PMS 310-1, with sufficient fuel for burning, four (3) drip torches, one (1) power saw, and one (1) backpack pump, one (1) tool for each crew member.
 - (c) The crew 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.
 - (d) All ignition and mop-up personnel will be directly supervised by a BLM representative.

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

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

Except as provided hereafter for fire escapement, the Purchaser shall continue the required assistance in mop up on each cutting unit shown on Exhibit A for seventy-two (72) hours, as directed by the Authorized Officer within a five (5) day period commencing at 8:00 a.m. the day following the completion of ignition in that unit, or until released from such service by the Government, whichever occurs first.

In event of a fire escapement, the Purchaser's personnel and equipment shall, under supervision of the Authorized Officer, take action to control and mop up the escaped fire until released from such service by the Government. If it becomes necessary to use furnished personnel and equipment for the suppression of a fire which escapes from the prescribed fire area for a period beyond the remainder of the day in which the fire escapes, then the Government shall, at its option: (1) reimburse the Purchaser for such additional use of personnel and equipment at wage rates shown in the current Administratively Determined Pay Rates for the Western Area and at equipment rates shown in the current Oregon-Washington Interagency Fire Fighting Equipment Rental Rates schedule until the Purchaser is released from such service by the Government; or (2) release the Purchaser from additional suppression work and assume responsibility for suppressing the escaped fire.

In situations where an escaped fire is controlled and contained by an adequate fire break (i.e., trail, road, stream, rock formation, etc.), the Government may permit the Purchaser to remove personnel for that day; provided that all mop up work on the escaped fire 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.

- (3) <u>SD-1a LOP AND SCATTER</u> Lop and scatter all slash as directed by the Authorized Officer, concurrently with normal felling operations. All tops and side branches must be free of the central stem so that such slash is reduced to the point that it is within eighteen (18) inches of the ground at all points.
- (4) <u>SD-1b HANDPILE AND BURN</u> Handpile all slash as directed by the Authorized Officer in accordance with the following specifications:
 - (a) Piling shall be accomplished by hand. Finished piles shall be tight and free of earth.

- (b) Pile all slash which is between one (1) and six (6) inches in diameter on the large end and exceeds three (3) feet in length.
- (c) A six (6) foot by six (6) foot sheet of four (4) mil polyethylene black plastic shall be placed in each pile in a manner such that approximately one-third $(\frac{1}{3})$ of the pile lies above it to hold it in place and so that a two (2) foot by two (2) foot dry ignition point is maintained for one (1) year or until burned. The ignition point will consist of fine fuel material such as needles, small limbs, and branches less than one-half (½) inch in diameter and free of dirt. Piles shall be constructed by aligning individual pieces in the same direction and placing the heavier slash on top. Piles shall have a stable base to prevent toppling. The long axis of individual pieces shall be oriented up and down the slope. Protruding pieces shall be trimmed to allow covering in a manner that permits the pile to shed water. Height shall be no less than four (4) feet and no greater than six (6) feet; width shall not exceed six (6) feet; piles shall be circular and not windrowed. No pile shall be located within sixty (60) feet of fish-bearing, perennial streams or within thirty five (35) feet from non-fish-bearing, intermittent streams. Piles shall not be located on down logs, stumps, talus slopes, roadways, or drainage ditches. No pile shall be located within ten (10) feet of reserve trees, any other pile, or unit boundary. No pile shall be located within twenty five (25) feet of designated wildlife trees. No portion of the pile will be under the crown of any living conifer tree.
- (d) Operations required by this provision shall be kept current with yarding as directed by the Authorized Officer and shall be conducted as follows:
 - (I) Units shall be piled and covered during the same season that they are logged. Piling shall be completed in each unit or portion thereof, within eight (8) weeks after being notified of BLM site treatment determination.
- (5) <u>SD-1c EXCAVATOR PILE AND BURN</u>. Pile all slash in units or portions of units as designated by the Authorized officer in accordance with the following specifications:
 - (a) Piling shall be accomplished with a track-mounted excavator with track shoes producing less than ten (10) pounds per square inch ground pressure. The excavator shall be equipped with a hydraulic thumb or rotating, controllable grapple head. The machine shall have a minimum reach of twenty five (25) feet. Finished piles shall be tight and free of earth. No portion of the excavator pile will be within 25 feet of the dripline of any living conifer tree.
 - (b) Pile all slash, brush and downed hardwoods which are greater than two (2) inch and less than sixteen (16) inches in diameter on the large end and exceed two (2) feet in length. Existing reproduction of commercial coniferous species shall be protected where feasible.

- (c) Unmerchantable logs greater than sixteen (16) inches on the small end shall be left in place, or positioned so that they will not be burned.
- (d) Prior to the commencement of piling work, all equipment shall meet the approval of the Authorized Officer.
- (e) Excavators are limited to designated skid roads approved by the Authorized Officer.
- (f) Additional trails needed shall be approved by the Authorized Officer, and the excavator shall be limited to one pass on these trails. The excavator shall pile by walking over the slash and working back to the designated trails. Existing reproduction of commercial coniferous species shall be protected where feasible.
- (g) A ten (10) foot by ten (10) foot cover of four (4) mil black plastic or equivalent material shall cap each excavator pile to maintain a dry ignition point. The cover shall be firmly fixed to each pile to hold it in place. Covering shall be done at time of piling.
- (h) Operations required by this provision shall be kept current with yarding as directed by the Authorized Officer and shall be conducted as follows:

 Units shall be piled and covered during the same season that they are logged. Piling shall be completed in each unit or portion thereof, within eight (8) weeks after being notified of BLM site treatment determination

(6) <u>SD-1f LANDING PILES</u>

(a) Logging Residue Reduction In addition to the requirements of Sections 15 and 25 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 Purchaser for such hazard, the Purchaser shall remain responsible to the Government for performance of the following hazard reduction and logging residue reduction measures required of them by this contract: (1) Landing pile construction and covering: Within thirty (30) feet of the edge of each landing, all tops, broken pieces, limbs and debris between two (2) and eight (8) inches in diameter at the large end and longer than three (3) feet in length shall be piled. Landing piles shall be kept free of dirt and located adjacent to roads at least twenty (20) feet from any Reserve Tree and/or as directed by the Authorized Officer. Upon completion of landing piling, and no later than September 30 of the same year of piling, the Purchaser shall prepare the landing piles for burning by securely covering each pile with a minimum 10-foot-by-10-foot cover of four (4) MIL polyethylene or alternate material as set forth in OAR 629-048-0210. The cover shall cap each landing pile to maintain a dry ignition point and shall be firmly fixed to each pile to hold it in place. To meet ignition and combustion needs, larger piles may require additional PE sheeting. Piles with material extending more than two (2) feet beyond the general contour of the pile shall be flattened or trimmed to allow for covering in a manner that permits the piles to shed water and to prevent

Round Mountain South SPECIAL PROVISIONS

tearing during wind events. Pile trimming or flattening shall be done prior to pile covering. Pieces of burnable material shall be placed on top of the plastic cover to secure it from moving and to prevent it from blowing off during strong winds. Landing pile size should not exceed a height of sixteen (16) feet or sixteen (16) feet in diameter. 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.

- (b) As directed by Authorized Officer, for a distance of thirty (30) feet from the perimeter of each landing along any rocked road, all logs more than eight (8) inches diameter at the small end and longer than eight (8) feet in length shall be decked or windrowed at the location designated by the Authorized Officer except logs removed from the contract area. If a log or a piece of a log meeting or exceeding the above specifications is bucked, all portions of that log shall be yarded and decked at the above-described location. Logging residue meeting this requirement shall not be piled for burning but shall be segregated into separate piles that are no closer than twenty (20) feet from residue piles that will be burned.
- (7) <u>SD-5</u> Perform logging residue reduction and site preparation work on approximately five hundred seventy-five (575) acres of harvest area as directed by the Authorized Officer.
 - (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.
 - (b) The following treatments were assumed for appraisal purposes on this contract:

Treatment/Level	Cost Per	Number of	Total Cost Per
	Acre	Acres	Treatment Type
Hand Pile/Cover Slash	\$545.00	300	\$163,500.00
Hand Pile Burn	\$75.00	300	\$22,500.00
Excavator Pile/Cover	\$490.00	200	\$98,000.00
Excavator Pile Burn	\$65.00	200	13,000.00
Lop and Scatter	\$48.00	75	\$3,600.00
Total Appraised Cost			\$300,600.00

(c) The total Purchase Price set forth in Section 2 shall be adjusted by the amount that the total cost of the site preparation treatments designated pursuant to Section 41(G)(2)(a) differs from: three hundred thousand six hundred dollars (\$300,600.00) as calculated by using the estimated acres determined by the Authorized Officer and the per acre costs listed in Section 41(G)(2)(a).

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.

Round Mountain South SPECIAL PROVISIONS

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

Seasonal Restriction Matrix

1 of 1

Round Mountain South Timber Sale ORM05-TS-2021.0008 Restricted Times are Shaded

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Possible Waived Times are Hatched

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	Activity	Road Rocking*	Road Grading*	Timber Haul*	Rock Haul* Wet

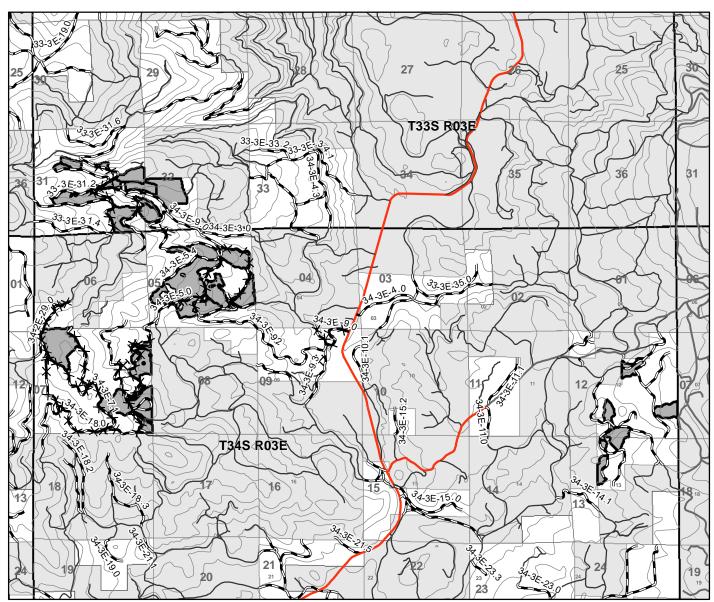
¹ Wet season restrictions may be shortened or extended depending on weather conditions (see L-19 in special provisions)

² Hauling restriction may be shortened or extended (see L-19 in special provisions)

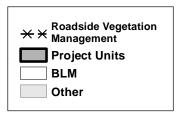
^{*}Additional restrictions will apply if a spotted owl nest site is found within 0.25 miles for most harvest related activities or 0.5 miles for blasting, if a gray wolf den is found within one mile of a unit, or if a fisher den site is found within 50 feet of proposed treatment areas(see E-3 in special provisions). State fire restrictions may apply.



U.S.D.I. BLM MEDFORD DISTRICT SALE NO. 2021.0008 ROUND MOUNTAIN SOUTH TIMBER SALE BUTTE FALLS FIELD OFFICE JACKSON COUNTY TIMBER SALE LOCATION MAP CONTRACT NO. ORM05-TS-2021.0008 EXHIBIT A PAGE 1 OF 8



Medford District BLM September 2021



1 in = 1 miles

Contours = 100 feet

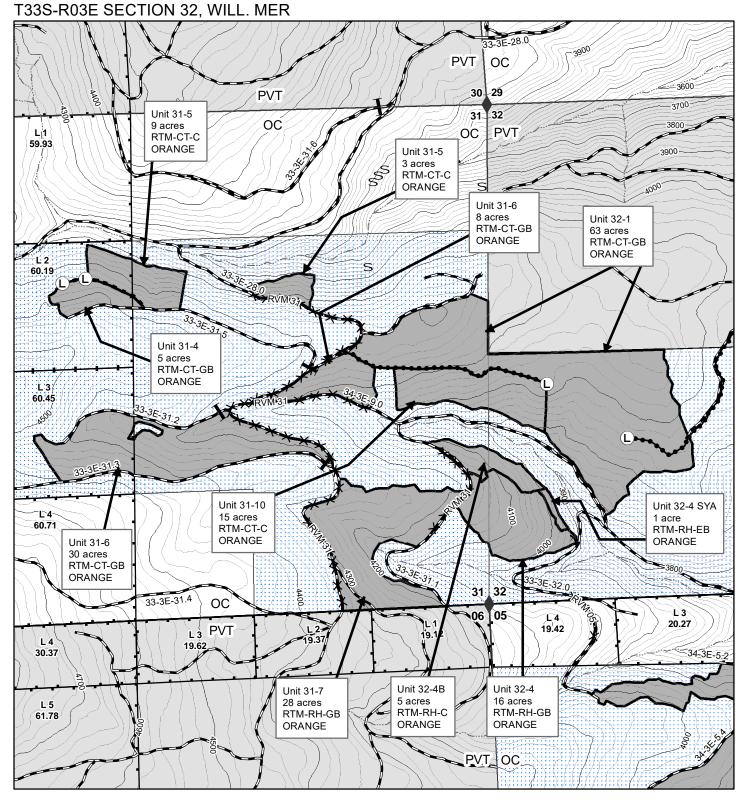
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Miles

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



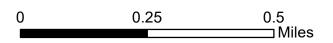




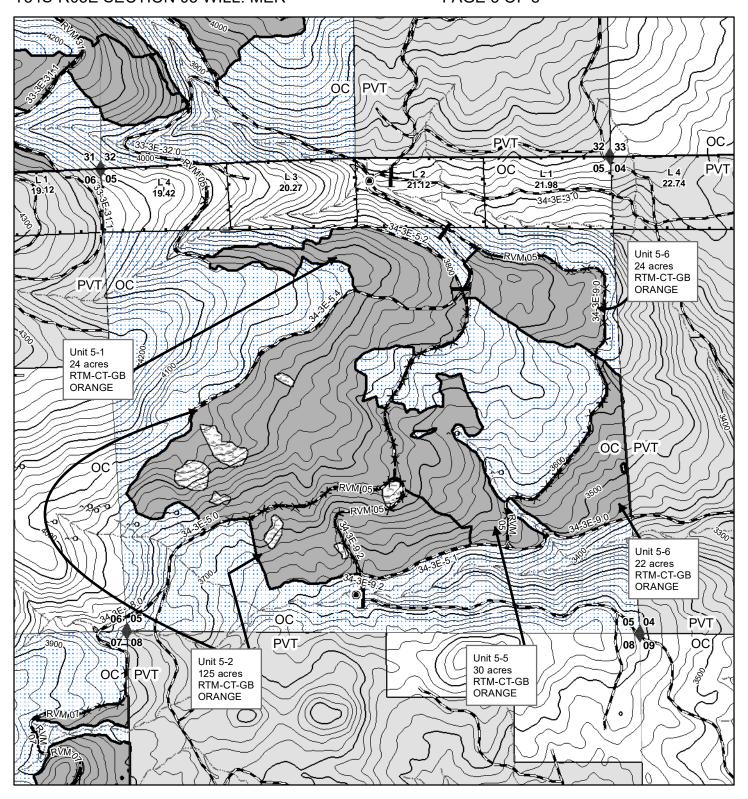
Medford District BLM September 2021







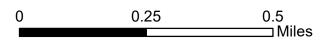




Medford District BLM September 2021

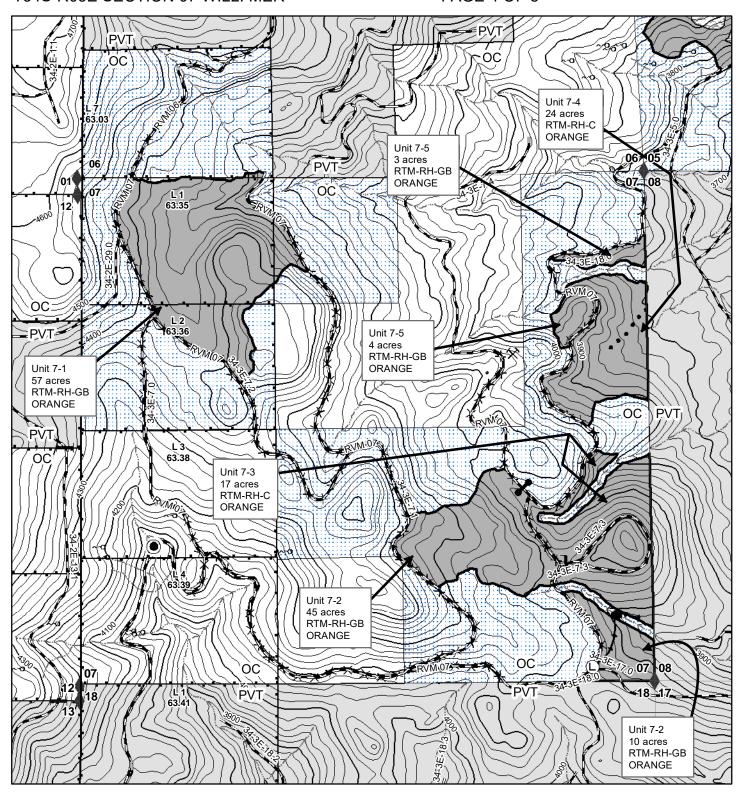








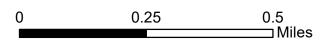
CONTRACT NO. ORM05-TS-2021.0008 PAGE 4 OF 8



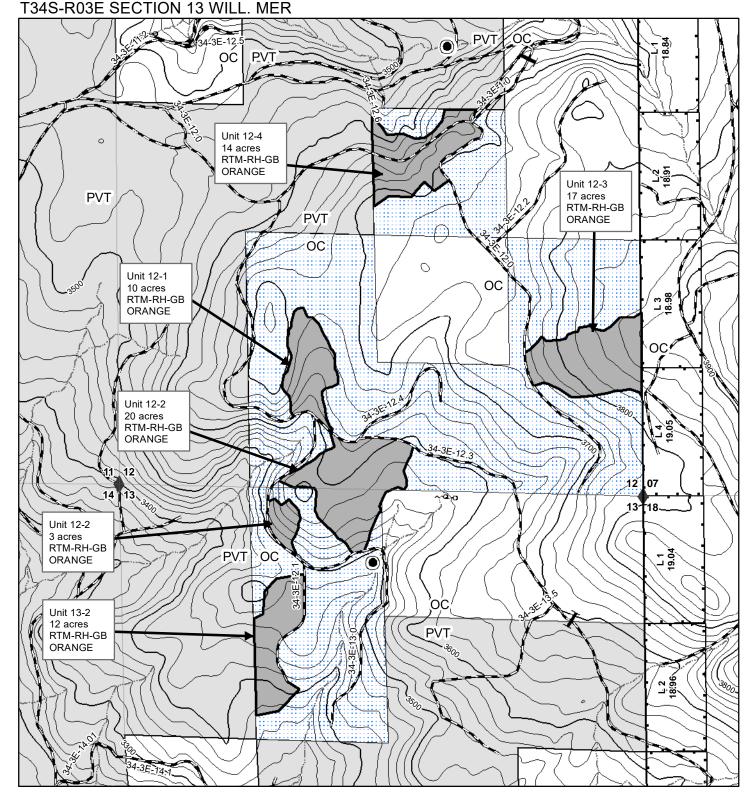
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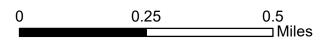




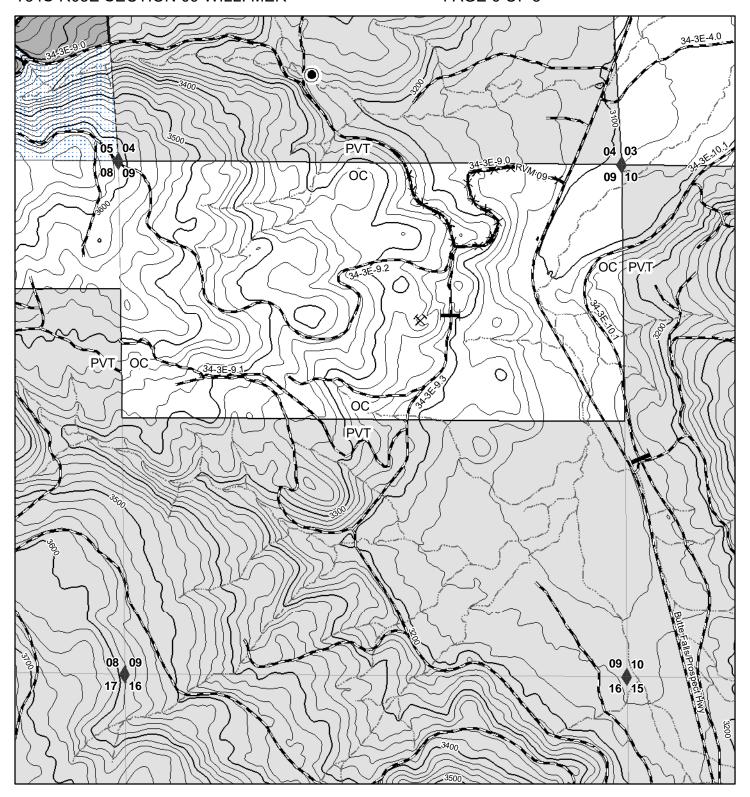
Medford District BLM September 2021







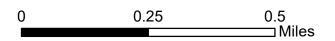




Medford District BLM September 2021









U.S.D.I. BLM MEDFORD DISTRICT SALE NO.2021.0008 TIMBER SALE CONTRACT MAP T. 33S. R. 03E. SEC 31, 32 T. 34S. R. 03E. SEC. 05, 07, 12, 13 WILL. MER. ROUND MOUNTAIN SOUTH TIMBER SALE

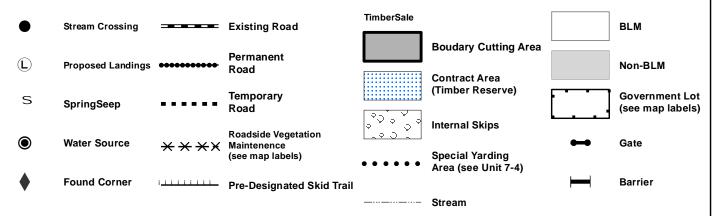
CONTRACT NO. ORM05-TS-2021.0008 **EXHIBIT A** PAGE 7 OF 8

Township Range	Section	Unit Number	Project Unit Acres	Reserve Acres	Contract Acres
33-3E	31	31-4, 31-5, 31-6, 31-7, 31-10	98	312	410
33-3E	32	32-1, 32-4, 32-4B	85	72	157
34-3E	5	5-1, 5-2, 5-5, 5-6	225	288	513
34-3E	7	7-1, 7-2, 7-3, 7-4, 7-5	160	337	497
34-3E	12	12-1, 12-2, 12-3, 12-4	61	291	250
34-3E	13	12-2, 13-2	15	68	83
			644	1368	1910

U.S.D.I. BLM MEDFORD DISTRICT SALE NO.2021.0008
T. 33S. R. 03E. SEC 31, 32
T. 34S. R. 03E. SEC. 05, 07, 12, 13 WILL. MER.
ROUND MOUNTAIN SOUTH TIMBER SALE

TIMBER SALE CONTRACT MAP CONTRACT NO. ORM05-TS-2021.0008 EXHIBIT A PAGE 8 OF 8

Legend



RTM-CT-GB-SKIPS
PAINT COLOR: ORANGE

RESERVE TREATMENT MARK COMMERCIAL THIN GROUND BASED UNIT - SKIPS ORANGE 5-1, 5-2, 5-5, 5-6, 31-4, 31-6, 32-1

RTM-RH-GB-SKIPS PAINT COLOR: ORANGE

RESERVE TREATMENT MARK REGENERATION HARVEST GROUND BASED UNIT - SKIPS PAINT COLOR: ORANGE 7-1, 7-2, 7-5, 12-1, 12-2, 12-3, 12-4, 13-2, 31-7, 32-4

RTM-CT-C-SKIPS PAINT COLOR: ORANGE RESERVE TREATMENT MARK COMMERCIAL THIN CABLE UNIT - SKIPS ORANGE 31-5, 31-10

RTM-RH-C-SKIPS
PAINT COLOR: ORANGE

RESERVE TREATMENT MARK REGENERATION HARVEST CABLE - SKIPS PAINT COLOR: ORANGE 7-3, 7-4, 32-4B

RTM-RH-EB PAINT COLOR: ORANGE

RESERVE TREATMENT MARK REGENERATION HARVEST ENDLINE-BULLINE ORANGE 32-4 SYA

UNITED STATES DEPARTMENT OF THE INTERIOR

Bureau of Land Management

Sale Number: ORM05-TS-2021.0008

Sale Name: Round Mtn South TS

District: Medford District BLM - BFFO

Stumpage Computation

	Pond	Logging	Profit &	Marg.	Stumpage
Species	Value	Costs (-)	Risk (-)	Logs (+)	
White Fir	\$488.30	\$299.41	\$43.95	\$0.00	\$144.94
Douglas-fir	\$755.19	\$299.41	\$67.97	\$0.00	\$387.81
Ponderosa Pine	\$316.96	\$299.41	\$28.53	\$0.00	(\$10.98)
Incense Cedar	\$586.42	\$299.41	\$52.78	\$0.00	\$234.23
Western Hemlock	\$477.24	\$299.41	\$42.95	\$0.00	\$134.88
Sugar Pine	\$317.64	\$299.41	\$28.59	\$0.00	(\$10.36)

Appraised Price Summary

		Unrounded S	Stumpage & Value	Adju	sted Appraised Price
Species	Volume	\$/M	Value	\$/M	Value
White Fir	6,943.0	\$144.94	\$1,006,318.42	\$143.80	\$998,403.40
Douglas-fir	3,442.0	\$387.81	\$1,334,842.02	\$384.10	\$1,322,072.20
Ponderosa Pine	472.0	(\$10.98)	(\$5,182.56)	\$31.70	\$14,962.40
Incense Cedar	324.0	\$234.23	\$75,890.52	\$232.20	\$75,232.80
Western Hemlock	280.0	\$134.88	\$37,766.40	\$133.80	\$37,464.00
Sugar Pine	34.0	(\$10.36)	(\$352.24)	\$31.80	\$1,081.20
TOTALS	11,495.0				\$2,449,216.00

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

Approved by: _C. Parks ___ Corsy Parks _ Approved 3/14/22





United States Department of the Interior Bureau of Land Management

Timber Appraisal

Sale Name: Round Mtn South TS

BLM District: Medford DO

Contract #: ORM05-TS-2021.0008

Sale Type: Advertised

Sale Date: Thursday, April 28, 2022

Unit of Measure: 16' MBF

Contract Term: 48 months

Contract Mechanism: 5450-3

Sale of Timber - Lump Sum

Content

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

Prepared By: Parks, Corey J - 3/14/2022 Approved By: Parks, Corey J - 3/14/2022

Legal Description of Contract Area

Land Status	County	Township	Range	Section	Subdivision	Meridian
O&C	Jackson	T33S	3E	5	S1/2NE1/4, Gov Lot 2, Gov Lot 3, Gov Lot 4, S1/2NW1/4, SW1/4, SE1/4.	Willamette
O&C	Jackson	T33S	3E	6	Gov Lot 7.	Willamette
O&C	Jackson	T33S	3E	7	NE1/4NE1/4, S1/2NE1/4, E1/2NW1/4, Gov Lot 1, Gov Lot 2, E1/2SW1/4, Gov Lot 3, Gov Lot 4, SE1/4.	Willamette
O&C	Jackson	T33S	3E	31	SE1/4NW1/4, Gov Lot 2, NE1/4SW1/4, Gov Lot 3, SE1/4.	Willamette
O&C	Jackson	T33S	3E	32	SW1/4.	Willamette
O&C	Jackson	T34S	3E	12	SW1/4NE1/4, E1/2SW1/4, NE1/4SE1/4, S1/2SE1/4.	Willamette
O&C	Jackson	T34S	3E	13	NW1/4NE1/4, E1/2NW1/4.	Willamette

Species Totals

Species	Net	Gross Merch	Gross	# of Merch Logs	# of Cull Logs	# of Trees
White Fir	6,943.0	7,586.0	8,201.0	68,368	3,948	15,086
Douglas Fir	3,442.0	3,699.0	3,764.0	47,614	454	11,438
Ponderosa Pine	472.0	517.0	544.0	6,293	959	1,552
Incense-cedar	324.0	354.0	363.0	6,256	128	2,660
Western Hemlock	280.0	314.0	316.0	3,933	55	1,155
Sugar Pine	34.0	35.0	37.0	223	36	48
Totals	11,495.0	12,505.0	13,225.0	132,687	5,580	31,939

Cutting Area Acres

Regeneration Harvest Acres	Partial Cut Acres	Right of Way Acres	Total Acres	Net Volume per Acre
286.0	358.0	9.0	653.0	17.6

Comments:

Do not use stumpage values from this appraisal. Refer to Deficit / Surplus sheet for advertised stumpage values as seen in prospectus.

Total Logging Cost per MBF:

\$299.41

Logging Costs	
Stump to Truck	\$1,574,855.75
Transportation	\$802,821.00
Road Construction	\$560,560.65
Maintenance/Rockwear	\$145,111.17
Road Use	\$0.00
Other Allowances	\$358,412.40
Total:	\$3,441,760.97

Logging Costs

Utilization Centers

Location	Distance	% of Net Volume
White City, OR	40.0 miles	100 %
	Profit & Risk	
Profit		8 %
Risk		1 %
Total Profit & Ric	sk	9 %

Tract Features

Quadratic Mean DBH	18.2 in
Average GM Log	96 bf
Average Volume per Acre	17.6 mbf
Recovery	87 %
Net MBF volume:	
Green	11,495.0 mbf
Salvage	0 mbf
Export	0 mbf
Ground Base Logging:	
Percent of Sale Volume	88 %
Average Yarding Slope	10 %
Average Yarding Distance	500 ft
Cable Logging:	
Percent of Sale Volume	12 %
Average Yarding Slope	40 %
Average Yarding Distance	325 ft
Aerial Logging:	
Percent of Sale Volume	0 %
Average Yarding Slope	0 %
Average Yarding Distance	0 ft

Cruise

Cruise Completed July 2021
Cruised By Parks, Worman, Caulfield.
Cruise Method

3P Cruise DF, WF, PP, IC, WH. 100% cruise SP. Form Class = DF-78, WF-80, PP-76, SP-78, IC-66, WH-74.

Stumpage Computation

Stumpage Summary

Species	# of Trees	Net Volume	Pond Value	(-) Profit & Risk	(-) Logging Costs	(+) Marginal Log Value	Appraised Price/MBF		Appraised Value
White Fir	15,086	6,943.0	\$488.30	\$43.95	\$299.41	\$0.00	\$144.90		\$1,006,040.70
Douglas Fir	11,438	3,442.0	\$755.19	\$67.97	\$299.41	\$0.00	\$387.80		\$1,334,807.60
Ponderosa Pine	1,552	472.0	\$316.96	\$28.53	\$299.41	\$0.00	\$31.70	*	\$14,962.40
Incense- cedar	2,660	324.0	\$586.42	\$ 52.78	\$299.41	\$0.00	\$234.20		\$75,880.80
Western Hemlock	1,155	280.0	\$477.24	\$ 42.95	\$299.41	\$0.00	\$134.90		\$37,772.00
Sugar Pine	48	34.0	\$317.64	\$28.59	\$299.41	\$0.00	\$31.80	*	\$1,081.20
Totals	31,939	11,495.0							\$2,470,544.70

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

^{**}Do not use stumpage values from this appraisal. Refer to Deficit / Surplus sheet for advertised stumpage values as seen in prospectus.**

Percent of Volume By Log Grade

Species	Peeler	No. 1 Sawmill	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
White Fir			1.0 %	72.0 %	25.0 %	2.0 %	
Species	No. 1 & 2 Peeler	No. 3 Peeler	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
Douglas Fir			6.0 %	65.0 %	26.0 %	3.0 %	
Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Ponderosa Pine							100.0 %
Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Incense-cedar							100.0 %
Species	Peeler	No. 1 Sawmill	Special Mill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	Camp Run
Western Hemlock				71.0 %	26.0 %	3.0 %	
Species	No. 1 Sawmill	No. 2 Sawmill	No. 3 Sawmill	No. 4 Sawmill	No. 5 Sawmill	No. 6 Sawmill	Camp Run
Sugar Pine							100.0 %

Unit Summary

Unit: 5-1

Species	Net	Gross Merch	Gross	# of Trees
White Fir	315.0	344.0	372.0	807
Douglas Fir	136.0	146.0	148.0	566
Western Hemlock	14.0	15.0	16.0	55
Incense-cedar	12.0	13.0	13.0	80
Ponderosa Pine	4.0	4.0	4.0	25
Sugar Pine	0.4	0.4	0.4	1
Totals:	481.4	522.4	553.4	1,534

Net Volume/Acre: 20.1 MBF

Regeneration Harvest	0.0
Partial Cut	24.0
Right of Way	0.0
Total Acres:	24.0

Unit: 5-2

Species	Net	Gross Merch	Gross	# of Trees
White Fir	1,100.0	1,199.0	1,299.0	2,856
Douglas Fir	510.0	544.0	551.0	1,814
Incense-cedar	63.3	69.2	72.2	486
Ponderosa Pine	48.5	54.3	58.1	281
Sugar Pine	3.1	4.0	4.0	9
Western Hemlock	3.0	3.0	3.0	13
Totals:	1,727.9	1,873.5	1,987.3	5,459

Net Volume/Acre: 13.8 MBF

Regeneration Harvest	0.0
Partial Cut	125.0
Right of Way	0.0
Total Acres:	125.0

Unit: 5-5

Species	Net	Gross Merch	Gross	# of Trees
White Fir	246.0	269.0	291.0	735
Douglas Fir	174.0	187.0	189.0	727
Western Hemlock	20.0	23.0	23.0	124
Incense-cedar	11.0	12.0	12.0	120
Ponderosa Pine	0.8	0.8	0.9	2
Sugar Pine	0.2	0.3	0.3	3
Totals:	452.0	492.1	516.2	1,711

Net Volume/Acre: 15.1 MBF

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

Unit: 5-6

Species	Net	Gross Merch	Gross	# of Trees
White Fir	461.0	504.0	545.0	1,520
Douglas Fir	197.0	212.0	215.0	754
Western Hemlock	41.0	46.0	46.0	202
Incense-cedar	14.0	15.0	16.0	131
Sugar Pine	4.0	4.0	4.0	8
Ponderosa Pine	0.2	0.2	0.2	1
Totals:	717.2	781.2	826.2	2,616

Net Volume/Acre: 15.6 MBF

Regeneration Harvest	0.0
Partial Cut	46.0
Right of Way	0.0
Total Acres:	46.0

Unit: 7-1

Species	Net	Gross Merch	Gross	# of Trees
White Fir	1,066.0	1,164.0	1,259.0	1,824
Douglas Fir	231.0	248.0	252.0	585
Incense-cedar	48.0	53.0	54.0	437
Totals:	1,345.0	1,465.0	1,565.0	2,846

Net Volume/Acre: 23.6 MBF

Regeneration Harvest	57.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	57.0

Unit: 7-2

Species	Net	Gross Merch	Gross	# of Trees
White Fir	802.0	877.0	948.0	1,537
Douglas Fir	220.0	235.0	239.0	712
Incense-cedar	43.0	47.0	48.0	260
Sugar Pine	10.0	10.0	10.0	9
Totals:	1,075.0	1,169.0	1,245.0	2,518

Net Volume/Acre: 19.5 MBF

Regeneration Harvest	55.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	55.0

Unit: 7-3

Species	Net	Gross Merch	Gross	# of Trees
White Fir	302.0	330.0	357.0	542
Douglas Fir	96.0	103.0	105.0	345
Incense-cedar	11.0	12.0	12.0	59
Western Hemlock	6.0	6.0	6.0	10
Totals:	415.0	451.0	480.0	956

Net Volume/Acre: 24.4 MBF

Regeneration Harvest	17.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	17.0

Unit: 7-4

Species	Net	Gross Merch	Gross	# of Trees
White Fir	317.0	347.0	377.0	597
Douglas Fir	244.0	261.0	265.0	667
Western Hemlock	12.0	12.0	12.0	37
Incense-cedar	9.0	10.0	10.0	61
Totals:	582.0	630.0	664.0	1,362

Net Volume/Acre: 24.3 MBF

Regeneration Harvest	24.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	24.0

Unit: 7-5

Species	Net	Gross Merch	Gross	# of Trees
White Fir	97.0	106.0	115.0	216
Douglas Fir	66.0	70.0	71.0	212
Incense-cedar	4.0	4.0	4.0	35
Western Hemlock	1.0	1.0	1.0	4
Totals:	168.0	181.0	191.0	467

Net Volume/Acre: 24.0 MBF

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

Unit: 12-1

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	110.0	118.0	120.0	257
White Fir	48.0	52.0	56.0	135
Incense-cedar	2.0	3.0	3.0	21
Ponderosa Pine	0.2	0.3	0.3	3
Totals:	160.2	173.3	179.3	416

Net Volume/Acre: 16.0 MBF

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

Unit: 12-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	194.0	208.0	211.0	443
White Fir	50.0	55.0	59.0	135
Incense-cedar	23.0	25.0	26.0	210
Sugar Pine	1.0	1.0	1.0	2
Ponderosa Pine	0.8	0.8	0.9	4
Totals:	268.8	289.8	297.9	794

Net Volume/Acre: 11.7 MBF

Regeneration Harvest	23.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	23.0

Unit: 12-3

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	114.0	122.0	124.0	183
White Fir	98.0	108.0	116.0	201
Incense-cedar	6.0	7.0	7.0	29
Sugar Pine	0.5	0.5	0.5	1
Ponderosa Pine	0.2	0.3	0.3	1
Totals:	218.7	237.8	247.8	415

Net Volume/Acre: 12.9 MBF

Regeneration Harvest	17.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	17.0

Unit: 12-4

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	132.0	141.0	143.0	316
White Fir	99.0	108.0	117.0	282
Incense-cedar	2.0	2.0	2.0	17
Western Hemlock	0.3	0.3	0.3	3
Totals:	233.3	251.3	262.3	618

Net Volume/Acre: 16.7 MBF

Regeneration Harvest	14.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	14.0

Unit: 13-2

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	132.0	142.0	144.0	375
White Fir	24.0	26.0	28.0	69
Incense-cedar	20.0	22.0	22.0	122
Ponderosa Pine	3.0	3.0	4.0	10
Sugar Pine	1.0	1.0	2.0	2
Totals:	180.0	194.0	200.0	578

Net Volume/Acre: 15.0 MBF

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

Unit: 31-4

Species	Net	Gross Merch	Gross	# of Trees
White Fir	19.0	21.0	22.0	51
Douglas Fir	12.0	13.0	13.0	58
Western Hemlock	12.0	14.0	14.0	54
Incense-cedar	0.8	0.9	0.9	5
Totals:	43.8	48.9	49.9	168

Net Volume/Acre: 8.8 MBF

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

Unit: 31-5

Species	Net	Gross Merch	Gross	# of Trees
Western Hemlock	42.0	47.0	47.0	167
Douglas Fir	22.0	23.0	24.0	82
White Fir	20.0	22.0	23.0	67
Incense-cedar	0.6	0.6	0.6	6
Totals:	84.6	92.6	94.6	322

Net Volume/Acre: 7.1 MBF

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

Unit: 31-6

Species	Net	Gross Merch	Gross	# of Trees
White Fir	228.0	249.0	269.0	487
Western Hemlock	122.7	139.7	140.7	454
Douglas Fir	107.0	115.0	117.0	382
Incense-cedar	10.0	11.0	11.0	80
Ponderosa Pine	8.0	9.0	9.0	23
Totals:	475.7	523.7	546.7	1,426

Net Volume/Acre: 12.5 MBF

Regeneration Harvest	0.0
Partial Cut	38.0
Right of Way	0.0
Total Acres:	38.0

Unit: 31-7

Species	Net	Gross Merch	Gross	# of Trees
White Fir	435.0	475.0	513.0	975
Douglas Fir	193.0	207.0	211.0	512
Incense-cedar	12.0	13.0	13.0	56
Totals:	640.0	695.0	737.0	1,543

Net Volume/Acre: 22.9 MBF

Regeneration Harvest	28.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	28.0

Unit: 31-10

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	82.0	88.0	89.0	342
White Fir	81.0	88.0	95.0	153
Ponderosa Pine	64.0	70.0	73.0	221
Sugar Pine	2.8	2.8	3.8	2
Totals:	229.8	248.8	260.8	718

Net Volume/Acre: 15.3 MBF

Regeneration Harvest	0.0
Partial Cut	15.0
Right of Way	0.0
Total Acres:	15.0

Unit: 32-1

Species	Net	Gross Merch	Gross	# of Trees
White Fir	533.0	583.0	630.0	962
Ponderosa Pine	296.0	324.0	341.0	854
Douglas Fir	159.0	171.0	173.0	534
Sugar Pine	8.0	8.0	8.0	8
Incense-cedar	4.0	4.0	4.0	18
Totals:	1,000.0	1,090.0	1,156.0	2,376

Net Volume/Acre: 15.9 MBF

Regeneration Harvest	0.0
Partial Cut	63.0
Right of Way	0.0
Total Acres:	63.0

Unit: 32-4

Species	Net	Gross Merch	Gross	# of Trees
White Fir	392.0	428.0	463.0	481
Douglas Fir	43.0	46.0	47.0	78
Incense-cedar	0.2	0.2	0.2	2
Totals:	435.2	474.2	510.2	561

Net Volume/Acre: 25.6 MBF

Regeneration Harvest	17.0
Partial Cut	0.0
Right of Way	0.0
Total Acres:	17.0

Unit: 32-4B

Species	Net	Gross Merch	Gross	# of Trees
White Fir	106.0	116.0	125.0	153
Douglas Fir	15.0	16.0	17.0	34
Totals:	121.0	132.0	142.0	187

Net Volume/Acre: 24.2 MBF

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

Unit: ROW 31

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	106.0	114.0	116.0	361
White Fir	67.0	73.0	79.0	134
Ponderosa Pine	28.0	31.0	32.0	80
Incense-cedar	12.0	13.0	13.0	87
Western Hemlock	6.0	7.0	7.0	32
Sugar Pine	3.0	3.0	3.0	3
Totals:	222.0	241.0	250.0	697

Net Volume/Acre: 74.0 MBF

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

Unit: ROW 32

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	19.0	29.0	29.0	53
Ponderosa Pine	15.0	16.0	17.0	33
White Fir	13.0	15.0	16.0	33
Incense-cedar	0.1	0.1	0.1	1
Totals:	47.1	60.1	62.1	120

Net Volume/Acre: 47.1 MBF

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

Unit: RVM 5

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	10.0	11.0	12.0	63
White Fir	2.0	2.0	2.0	13
Incense-cedar	2.0	2.0	2.0	28
Ponderosa Pine	0.3	0.3	0.3	3
Totals:	14.3	15.3	16.3	107

Net Volume/Acre: 14.3 MBF

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

Unit: RVM 6

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	16.0	17.0	18.0	93
White Fir	2.0	2.0	2.0	15
Incense-cedar	1.0	1.0	1.0	13
Totals:	19.0	20.0	21.0	121

Net Volume/Acre: 19.0 MBF

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

Unit: RVM 7

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	81.0	89.0	96.0	793
White Fir	12.0	14.0	14.0	90
Incense-cedar	12.0	13.0	15.0	291
Totals:	105.0	116.0	125.0	1,174

Net Volume/Acre: 105.0 MBF

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

Unit: RVM 9

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	6.0	6.0	7.0	24
White Fir	3.0	3.0	3.0	4
Ponderosa Pine	3.0	3.0	3.0	11
Totals:	12.0	12.0	13.0	39

Net Volume/Acre: 12.0 MBF

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

Unit: RVM 31

Species	Net	Gross Merch	Gross	# of Trees
Douglas Fir	15.0	17.0	18.0	73
White Fir	5.0	6.0	6.0	12
Incense-cedar	1.0	1.0	1.0	5
Totals:	21.0	24.0	25.0	90

Net Volume/Acre: 21.0 MBF

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

Total Stump To Truck	Net Volume	\$/MBF	
\$1,574,855.75	11,495.0	\$137.00	

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

Yarding System	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Cable: Medium Yarder	GM MBF	1,555.0	\$204.65	\$318,230.75	Weighted Cable cost for yoader and medium tower for units 31-10 and 32-4B.
SYA unit 32-4	GM MBF	20.0	\$174.32	\$3,486.40	SYA bull line (1ac) unit 32-4
Wheel Skidder	GM MBF	6,000.0	\$128.13	\$768,780.00	Hand Falling 26" DBH and above
Feller Buncher	GM MBF	4,930.0	\$96.82	\$477,322.60	mechanized falling / rubber tire skidder
Subtotal				\$1,567,819.75	

Additional Costs

Item	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Subtotal				\$0.00	

Additional Moves

Equipment	Unit of Measure	# of Units of Measure	\$/Unit of Measure	Total Cost	Remarks
Loader	Hour	12.0	\$175.00	\$2,100.00	3 additional moves @ 4hrs/move
Cable: Medium Yarder	Hour	4.0	\$169.00	\$676.00	1 additional cable move @ 4hrs/move
Feller Buncher	Hour	12.0	\$140.00	\$1,680.00	3 additional moves @ 4hrs/move
Wheel Skidder	Hour	12.0	\$115.00	\$1,380.00	3 additional moves @ 4hrs/move
Stroke Delimber	Hour	12.0	\$100.00	\$1,200.00	3 additional processor moves @ 4hrs/move
Subtotal				\$7,036.00	

Total	Net Volume	\$/MBF		
\$802,821.00	11,495.0	\$69.84		

Utilization Center	One Way Mileage	Description	Unit of Measure	# of Units	\$/Unit of Measure	Total Cost	% of Sale Volume
White City, OR	40.0	All species	GM MBF	12,505.0	\$64.20	\$802,821.00	100 %

Engineering Allowances

Total	Net Volume	\$/MBF		
\$705,671.82	11,495.0	\$61.39		

Cost Item	Total Cost
Road Construction:	\$560,560.65
Road Maintenance/Rockwear:	\$145,111.17
Road Use Fees:	\$0.00

Total	Net Volume	\$/MBF		
\$358,412.40	11,495.0	\$31.18		

Environmental Protection

Cost item	Total Cost
Log barricade	\$3,000.00
Waterbar skids	\$3,000.00
Landing Cleanup	\$8,100.00
Equipment Washing #2	\$750.00
Equipment Washing #4	\$750.00
Equipment Washing #5	\$750.00
Ripping	\$7,000.00
Equipment Washing #1	\$1,500.00
Equipment Washing #3	\$500.00
Seed & Mulch	\$4,030.00
Subtotal	\$29,380.00

Logging

Cost item	Total Cost
Directional Falling	\$7,000.00
Corridor location	\$550.60
Skid location	\$1,651.80
Woody Debris 100'	\$5,400.00
Unit 7-2 pre-des skid	\$540.00
Fell / Buck / CWD Oversize	\$3,000.00
Skid Construction	\$3,750.00
Landing Construction	\$4,740.00
Riparian Corridor Logs	\$450.00
Deadman anchor	\$1,350.00
Subtotal	\$28,432.40

Slash Disposal & Site Prep

Cost item	Total Cost
Lop and Scatter	\$3,600.00
Excavator Pile Burn	\$6,500.00
Hand Pile Burn	\$22,500.00
Excavator Pile Burn #2	\$6,500.00
Excavator Pile #2	\$49,000.00
Excavator Pile / Cover	\$49,000.00
Hand Pile / Cover	\$163,500.00
Subtotal	\$300,600.00

Comments:

Directional Falling = L-10 stip

Woody Debris Placement = L-12 stip, where skids meet system rds.

Unit 7-2 pre-des skid = L-12 stip pull culvert re-contour stream channel, place bales.

Deadman anchor = Unit 31-5 L-12 stip.

Equipment Washing #1 = Loader @ \$500 x 3 seasons

Log barricade = E-1(5) stip

Fell / Buck / CWD Oversize = L-32 stip oversize 40" DBH

Seed & Mulch = top 20' of skyline corridors, 7-2 pre-des skid, first 100' skids

Ripping = regeneration harvest units

Equipment Washing #2 = Skidder @ \$250 x 3 seasons

Equipment Washing #3 = Yarder / Yoader @ \$500 x 1 season

Equipment Washing #4 = Feller / Buncher @ \$250 x 3 seasons

Equipment Washing #5 = Cat @ \$250 x 3 seasons

Riparian Corridor Logs = L-32 (23, 24) stip fell and leave corridor trees in riparian

Excavator Pile #2 = machine pile vine maple for site prep

Excavator Pile #2 = burn vine maple piles

Maintenance Appraisal Print Date: 8/11/2021 6:57:02 AM

Sale: Round Mountain South

Sale Date: 09/16/2021 Prep. By : Brown

UNITED STATES Prep. By : Brown
DEPARTMENT OF THE INTERIOR Tract No: ORM05-TS-2021.0008

DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

ROAD MAINTENANCE AND ROAD USE APPRAISAL WORK SHEET

Summary of Costs

1.1) Road Use - Amortization: \$0.00/11495 MBF = \$0/MBF	
Road Maintenance Obligation: (2.1) BLM Maintenance	\$33,667.68 358.86 08.88 \$22,167.74 \$0.00 \$7,969.31 \$806.36 \$64,611.09
Purchaser Maintenance Allowances:	
(5.2A) Move In	\$0.00
(5.2B) Culverts, Catch Basins, Downspouts	\$3,262.09
(5.2C) Grading, Ditching	\$15,475.78
(5.2D) Slide Removal and Slump Repair	\$0.00
(5.2E) Dust Palliative (Water)	\$37,663.92
(5.2F) Surface Repair (Aggregate)	\$7,825.00
(5.2G) Other	\$0.00
Total Purchaser Maintenance Allowances (5.2A-5.2G)	\$64,226.79
(2.1-5.2G) Cost $($64,611.09 + $64,226.79) = $128,837.88$ Cost/MBF 128837.88 / 11495 MBF =	\$11.21/MBF
(5.2H) Decommissioning	\$16,273.29
(5.2H) Cost/MBF \$16,273.29/11495 MBF =	\$1.42/MBF
(2.1-5.2H) Cost (\$64,611.09 + \$64,226.79 + \$16,273.29) = \$145,111	1.17
Total Cost/MBF (Excluding Road Use) \$145,111.17/11495 MBF =	\$12.62/MBF

1) Road Use Fees - Amortization

Details

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

Subtotal by agreement number

(1.1) Subtotal \$0.00

2) BLM Maintenance - Timber Haul

MA	INTENAN	CE (2.3	1)	R	OCKWEAI	R (2.2	2)
Road Number A Surf		Maint	Vol				
and Segment N Type		Fee x	MBF	= Maint F			Rkwear
33-3E-28.00 E1AA AGG	0.13	0.76	1145	\$113.15	0.73	114!	
33-3E-28.00 E1BA AGG	0.07	0.76	1038	\$55.22	0.73	1038	
33-3E-28.00 E1CA AGG	0.07	0.76	126	\$6.71	0.73	120	
33-3E-28.00 E1DA AGG	0.24	0.76	31	\$5.67	0.73	3.	
33-3E-28.00E2AA AGG 33-3E-28.00E2BA AGG	0.04 0.25	0.76 0.76	447 200	\$13.58 \$38.00	0.73 0.73	447 200	\$13.04 \$36.50
33-3E-28.00E2CA AGG	0.25	0.76	335	\$66.20	0.73	335	\$63.58
33-3E-28.00E2DA AGG	0.10	0.76	146	\$11.10	0.73	146	\$10.66
33-3E-28.00F N AGG	0.90	0.99	135	\$120.29	0.00	135	\$0.00
34-2E-29.00 C N AGG	0.41	0.99	154	\$62.51	0.73	154	\$46.09
34-2E-29.00 C N AGG	0.13	0.99	274	\$35.26	0.73	274	\$26.00
34-3E-01.00 B N AGG	0.02	0.99	10	\$0.20	0.73	10	\$0.15
34-3E-05.00 A AGG	0.39	0.76	2688	\$796.69	0.73	2688	\$765.25
34-3E-05.00 A AGG	0.16	0.76	2105	\$255.97	0.73	2105	\$245.86
34-3E-05.01 A AGG	0.31	0.76	4621	\$1,088.78	0.73		\$1,045.80
34-3E-07.00 N AGG	0.54	0.99	694	\$371.01	0.73	694	\$273.57
34-3E-07.00 N AGG	0.19	0.99	459	\$86.34	0.73	459	\$63.66
34-3E-09.00 A-BA AGG	0.64	0.76	8695	\$4,229.25	0.73	869!	
34-3E-09.00 C-DN AGG	0.72	0.99	8683	\$6,189.24	0.00	8683	•
34-3E-09.00 E A AGG 34-3E-09.00 E A AGG	0.25 0.08	0.76 0.76	8683 4062	\$1,649.77 \$246.95	0.73 0.73	4062	\$1,584.65 \$237.20
34-3E-09.00 E A AGG	0.40	0.76	3932	\$1,195.24	0.73		\$1,148.06
34-3E-09.00 E A AGG	0.49	0.76	3592	\$1,337.55	0.73		\$1,284.75
34-3E-09.00 E A AGG	0.22	0.76	3255	\$544.27	0.73	3255	\$522.79
34-3E-09.00 F A AGG	0.37	0.76	2803	\$788.23	0.73	2803	\$757 . 12
34-3E-09.00 F A AGG	0.21	0.76	2433	\$388.32	0.73	2433	\$372.99
34-3E-09.00 F A AGG	0.31	0.76	2233	\$526.12	0.73	2233	\$505.35
34-3E-09.00 F A AGG	0.31	0.76	1647	\$388.01	0.73	1647	\$372.69
34-3E-09.02 B A AGG	0.35	0.76	4333	\$1,152.66	0.73		\$1,107.16
34-3E-12.00 A N AGG	0.13	0.99	1061	\$136.55	0.73	1061	\$100.69
34-3E-12.00 B N AGG	0.22	0.99	1061	\$231.09	0.00	1061	\$0.00
34-3E-12.00 B N AGG	0.21	0.99	452	\$93.97	0.00	452	\$0.00
34-3E-12.00 C N AGG 34-3E-12.00 C N AGG	0.35 0.48	0.99 0.99	452 219	\$156.62 \$103.93	0.73 0.73	452 219	\$115.49 \$76.63
34-3E-12.00 C N AGG	0.46	0.99	609	\$391.89	0.73	609	\$288.97
34-3E-12.01 B N AGG	0.36	0.99	354	\$126.17	0.73	354	\$93.03
34-3E-12.01 B N AGG	0.24	0.99	180	\$42.77	0.73	180	\$31.54
34-3E-12.03 A N AGG	0.20	0.99	95	\$18.77	0.73	95	\$13.84
34-3E-13.00 N AGG	0.15	0.99	93	\$13.81	0.73	93	\$10.18
34-3E-18.00 A N AGG	0.16	0.99	1739	\$275.46	0.00	1739	\$0.00
34-3E-18.00 B N AGG	0.16	0.99	1739	\$275.46	0.73	1739	\$203.12
34-3E-18.00 C N AGG	0.57	0.99	1739	\$981.32	0.73	1739	\$723.60
34-3E-18.00 C N AGG	0.58	0.99	1045	\$600.04	0.73	1045	\$442.45
34-3E-18.00 C N AGG	0.07	0.99	5	\$0.35	0.73	5	\$0.26

34-3E-18.00 C N AGG	0.30	0.99	190	\$56.43	0.73	190	\$41.61
34-3E-18.00 C N AGG	0.16	0.99	1265	\$200.38	0.73	1265	\$147.75
34-3E-18.00 C N AGG	0.24	0.99	1355	\$321.95	0.73	1355	\$237.40
34-3E-18.00 C N AGG	1.01	0.99	2105	\$2,104.79	0.73	2105	\$1,552.02
34-3E-19.03 A-BN AGG	1.72	0.99	1739	\$2,961.17	0.00	1739	\$0.00
34-3E-29.01 A A AGG	0.63	0.76	1739	\$832.63	0.73	1739	\$799.77
34-3E-29.01 B N AGG	0.28	0.99	1739	\$482.05	0.00	1739	\$0.00
34-3E-29.01 C N AGG	0.15	0.99	1739	\$258.24	0.73	1739	\$190.42
34-3E-29.01 D N AGG	0.27	0.99	1739	\$464.83	0.00	1739	\$0.00
34-3E-29.01 E N AGG	0.45	0.99	1739	\$774.72	0.73	1739	\$571.26

3) Third Party Maintenance and Rockwear

* Agg Road - Rock placed in lieu of fees

(2.1) Subtotal \$33,667.68 (2.2) Subtotal \$20,358.86

Agg Road - Rock placed in fled of fees								
		MAINTENANCE (3	1.1)			ROCKWE	AR (3.2)	
Agrmnt	Surface	e Road						
Number	Type	Number	Mi x	Fee	x MBF	=	Maint Fee x MBF =	Rkwear
M-2000C	AGG	34-3E-05.05	0.07				$$0.73 \times 452.1 = 23.1	L O
M-2000C	AGG	33-3E-32.01	0.61				$$0.73 \times 452.1 = $201.$. 32
M-2000D	NAT	34-3E-12.00*	0.21				$$0.00 \times 452 = 0.00)
M-2000D	NAT	34-3E-12.00*	0.22				$$0.00 \times 1061 = 0.00)
M-2000E	AGG	34-3E-29.01 D	0.27				$$0.73 \times 1739 = $342.$	76
M-2000E	AGG	34-3E-29.01 B	0.28				$$0.73 \times 1739 = $355.$	45
M-2000E	AGG	34-3E-09.00 C-D	0.72				$$0.73 \times 8683 = $4,56$	3.78
M-2000E	AGG	33-3E-31.07	0.13				\$0.73 x 80 = \$7.59)
M-2000E	AGG	33-3E-28.00 F	0.90				\$0.73 x 135 = \$88.7	70
M-2000F	AGG	34-3E-19.03 A-B	1.72				$$0.73 \times 1739 = $2,18$	33.49
M-2000F	AGG	34-3E-18.00 A	0.16				$$0.73 \times 1739 = $203.$	12

Subtotal of maintenance fees by agreement number:

Subtotal of rockwear fees by agreement number:

M-2000C	\$224.42
M-2000D	\$0.00
M-2000E	5,358.28
M-2000F	2,386.61

\$7,969.31

(3.1) Subtotal

\$0.00 (3.2) Subtotal

4) Other Maintenance Payments - USFS or Others Perform Maintenance

Fee is \$0.76/MBF

		Miles	VOT	Fee	
Agency	Road Number	(Log) x	(mbf)	x MBF/MI =	Cost
FS	FS 34	2.43			\$806.36

(4.1) Subtotal \$806.36

5) Purchaser Maintenance - Rock Wear

* FS BST Road

TIMBER HAUL (5.1)

Road No	A	RkWear	Vol Total	-
and Segment	N Mi	x Fee x	MBF = RkWea	ır
33-3E-31.01	A 0.25	\times \$0.73	x 586.2 =	\$106.98
33-3E-31.01	A 0.32	$2 \times \$0.73$	x 451 =	\$105.35

33-3E-31.02	Α	0.37	x	\$0.73	х	246.7 =	\$66.63
33-3E-31.03	Α	0.60	x	\$0.73	х	135 =	\$59.13
33-3E-31.05	Α	0.40	x	\$0.00	х	107.3 =	\$0.00
33-3E-31.05	Α	0.16	x	\$0.00	х	43.8 =	\$0.00
33-3E-31.07	Α	0.13	x	\$0.00	х	80 =	\$0.00
NC 33-3E-31.08	Α	0.43	x	\$0.73	х	887.8 =	\$278.68
33-3E-32.00	Α	0.10	x	\$0.73	х	370 =	\$27.01
33-3E-32.01	N	0.61	x	\$0.00	х	452.1 =	\$0.00
33-3E-32.02 A1	N	0.07	х	\$0.73	х	452.1 =	\$23.10
33-3E-32.02 A2	N	0.21	x	\$0.00	х	452.1 =	\$0.00
NC 33-3E-32.02B	N	0.14	x	\$0.00	х	452.1 =	\$0.00
34-3E-03.00 B	Α	0.02	х	\$0.73	х	452.1 =	\$6.60
34-3E-05.02	Α	0.32	x	\$0.00	х	225 =	\$0.00
34-3E-05.04	Α	0.23	x	\$0.00	х	486.4 =	\$0.00
34-3E-05.04	Α	0.43	х	\$0.00	х	300 =	\$0.00
34-3E-05.05	N	0.07	х	\$0.00	х	452.1 =	\$0.00
34-3E-07.01	N	0.49	x	\$0.73	х	990 =	\$354.12
34-3E-07.01	N	0.21	x	\$0.73	х	840 =	\$128.77
34-3E-07.01	N	0.70	х	\$0.73	х	825 =	\$421.58
34-3E-07.02	N	0.42	х	\$0.73	х	15 =	\$4.60
34-3E-07.02	N	0.26	x	\$0.73	х	235 =	\$44.60
34-3E-07.03	Α	0.43	x	\$0.73	х	565 =	\$177.35
34-3E-07.04	Α	0.40	х	\$0.73	х	15 =	\$4.38
34-3E-09.02 C	Α	0.45	x	\$0.00	х	1355.4 =	\$0.00
FS 34*	Α	2.43	x	\$0.00	x	1061 =	\$0.00

(5.1) Subtotal \$1,808.88

Purchaser Operational Maintenance

Move In							
	No	Move	Cost/	Dist	Sub-		
Equipm	nent	Unit	s x in x	50 Mi	x Factor	=	total
Motor Gr	ader	:		450	0.63		\$0.00
Back Hoe	:			335	0.63		\$0.00
Loader:				450	0.63		\$0.00
Water Tr	uck:			107	0.63		\$0.00
Dump Tru	ıck:			102	0.63		\$0.00
Excavato	r:			450	0.63		\$0.00
Roller:				450	0.63		\$0.00

(5.2A) Total \$0.00

Culvert Maintenance - Including Catch basins and Downpipes

```
\frac{\text{Miles x Cost/Mi} = \text{Subtotal}}{3262.09}
7.31
```

(5.2B) Total <u>3262.09</u>

Grading (Includes Ditches and Shoulders)

Miles	x	Cost/Mi	x Freq	= Subtotal		
Blade	w/	Ditch:	7.31	774.5	2	\$11,323.19
Blade	w/o	Ditch:	4.43	468.69	2	\$4,152.59

(5.2C) Total <u>\$15,475.78</u>

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

Type	No Slides		Hours	Equip	
Equipment	/Slumps	Х	Each	x Cost	= Subtotal
Grader:	0		0	\$154.22	\$0.00
Loader:	0		0	\$114.43	\$0.00
Backhoe:	0		0	\$99.10	\$0.00

(5.2D) Total \$0.00

Dust Palliative (Water)

Spreading Hours

	No	Freq	Truck			
	Miles	/ MPH	= Hours	x Days	x /Day	= Hours
	13.58	5	2.7	90	1	243
Load & Haul =			1.0	90	1	90
Return trip =			1.0	90	1	90
Total Hours =			423			

Truck Cost: $$89.04/Hr. \times 423.0 \text{ Hours} = $37,663.92$

(5.2E) Total \$37,663.92

Surface Repair (Aggregate)

Quarry / Source Name:	_Vine Maple Quarry		
Production Cost:	500.0 CY x \$3.30/CY		= \$1,650.00
Haul to Stockpile:			
Grades > 15%	500.0 CY x ((\$1.99/CY x	0.00 Mi) + \$0.66)	= \$0.00
Grades <= 15%	500.0 CY x ((\$1.00/CY x	0.00 Mi) + \$0.66)	= \$0.00
State / Co Roads	500.0 CY x (($$0.44$ /CY x	0.00 Mi) + \$0.66)	= \$0.00
Load from Stockpile:	500.0 CY x \$1.16/CY		= \$580.00
Haul from Stockpile:			
Grades > 15%	500.0 CY x ((\$1.99/CY x	3.00 Mi)	= \$2,985.00
Grades <= 15%	500.0 CY x ((\$1.00/CY x	3.00 Mi)	= \$1,500.00
State / Co Roads	$500.0 \text{ CY } \times ((\$0.44/\text{CY } \times$	0.00 Mi)	= \$0.00
Process with Grader:	500.0 CY x \$1.01/CY		= \$505.00
Compaction:	500.0 CY x \$1.21/CY		= \$605.00
		SubTotal	\$7,825.00

(5.2F) Total \$7,825.00

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

(5.2G) Total \$0.00

Ripping

Road Number	Ripping Cost	x (NumSta	or CuYds)	= Total
Temp 31-5	33 x	9.5		= \$313.50
Temp 32-1	33 x	12.67		= \$418.11

(Ripping) Total \$731.61

Pipe Removal

Road	Qty	Cyd	Cyd	Qty	
Number	Ditch Pipes	< 15' Fill	> 15' Fill	Hauling	= Tota
34-3E-09.03 A	(1x119.31)	+ (40x2.9) +	(0x4.84) + (0	(x81.78) =	\$235.31
34-3E-09.03 A	(1x119.31)	+ (40x2.9) +	(0x4.84) + (0	(x81.78) =	\$2

(Pipe Removal) Total \$235.31

Other Costs

Road	Cubic Y	ds	Qty		Qty		
Number	Pullback Ma	teri	al Waterba	ars	Earthen Ba	rriers = 7	Total
33-3E-31.02	(0x1.94)	+	(18x59.77)	+	(1x179.3)	= \$1,255.16	
33-3E-31.03	(0x1.94)	+	(30x59.77)	+	(1x179.3)	= \$1,972.40	
33-3E-32.02	A1(0x1.94)	+	(0x59.77)	+	(1x179.3)	= \$179.30	
33-3E-32.02	A2(0x1.94)	+	(10x59.77)	+	(1x179.3)	= \$777.00	
NC 33-3E-32	.02B(0x1.94)	+	(7x59.77)	+	(0x179.3)	= \$418.39	
34-3E-05.02	(0x1.94)	+	(15x59.77)	+	(1x179.3)	= \$1,075.85	
34-3E-05.04	(0x1.94)	+	(32x59.77)	+	(1x179.3)	= \$2,091.94	
33-3E-31.05	(0x1.94)	+	(28x59.77)	+	(1x179.3)	= \$1,852.86	
34-3E-09.03	A(0x1.94)	+	(0x59.77)	+	(1x179.3)	= \$179.30	
Temp 31-5	(0x1.94)	+	(9x59.77)	+	(1x179.3)	= \$717.23	
Temp 32-1	(0x1.94)	+	(12x59.77)	+	(1x179.3)	= \$896.54	

(Other Cost) Total \$11,415.97

Time & Equipment

```
33-3E-32.02 A2 Seeding and Mulching: 0.1 AC @ $896.08/AC
                                                                       =$89.61
NC 33-3E-32.02B Seeding and Mulching: 0.35 AC @ $896.08/AC
                                                                       =$313.63
33-3E-32.02 A2 Camouflaging Excavator -Small (1.5 CY): 2 hr @ $111.38/hr
                                                                       =$222.76
34-3E-05.02 Camouflaging Excavator -Small (1.5 CY): 2 hr @ $111.38/hr =$222.76
34-3E-05.04 Camouflaging Excavator -Small (1.5 CY): 2 hr @ $111.38/hr =$222.76
33-3E-31.05 Camouflaging Excavator -Small (1.5 CY): 2 hr @ $111.38/hr =$222.76
33-3E-31.05 Seeding and Mulching: 1.35 AC @ $896.08/AC
                                                                       =$1,209.71
Temp 31-5 Camouflaging Excavator -Small (1.5 CY): 2 hr @ $111.38/hr
                                                                       =$222.76
Temp 31-5 Seeding and Mulching: 0.45 AC @ $896.08/AC
                                                                       =$403.24
Temp 32-1 Camouflaging Excavator -Small (1.5 CY): 2 hr @ $111.38/hr
                                                                       =$222.76
Temp 32-1 Seeding and Mulching: 0.6 AC @ $896.08/AC
                                                                       =$537.65
```

(5.2H) Decommissioning Total \$16,273.28

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

Contract No.

ORM05-TS-2021.0008

Round Mountain South

EXHIBIT B / PRE-SALE

5450-3

SPECIES	ESTIMATED VOLUM (Units Spec		JANTITY		PRICE PER UNIT	ESTIMATED VOLUME OR QUANTITY X UNIT PRICE
White Fir		6,	943.0	MBF	\$143.80	\$998,403.40
Douglas Fir		3,	442.0	MBF	\$384.10	\$1,322,072.20
Ponderosa Pine			472.0	MBF	\$31.70	\$14,962.40
Incense-cedar			324.0	MBF	\$232.20	\$75,232.80
Western Hemlock			280.0	MBF	\$133.80	\$37,464.00
Sugar Pine			34.0	MBF	\$31.80	\$1,081.20
TOTALS			11,495.0	MBF		\$2,449,216.00
The apportionment of the total purchase J	price is as follows:					
<u>Unit 5-1 - 5-1</u>						
Sugar Pine	0.4 MBF	Χ	\$31.80	=	\$12.72	
White Fir	315.0 MBF	Χ	\$143.80	=	\$45,297.00	
Douglas Fir	136.0 MBF	Χ	\$384.10	=	\$52,237.60	
Western Hemlock	14.0 MBF	Χ	\$133.80	=	\$1,873.20	
Ponderosa Pine	4.0 MBF	Χ	\$31.70	=	\$126.80	
Incense-cedar	12.0 MBF	Χ	\$232.20	=	\$2,786.40	
Total	481.4 Mbf				\$102,333.72	÷ 24.0 acres = \$4,263.91/Acre
<u>Unit 5-2 - 5-2</u>						
Sugar Pine	3.1 MBF	Χ	\$31.80	=	\$98.58	
White Fir	1,100.0 MBF	Χ	\$143.80	=	\$158,180.00	
Douglas Fir	510.0 MBF	Χ	\$384.10	=	\$195,891.00	
Western Hemlock	3.0 MBF	Χ	\$133.80	=	\$401.40	
Ponderosa Pine	48.5 MBF	Χ	\$31.70	=	\$1,537.45	
Incense-cedar	63.3 MBF	Χ	\$232.20	=	\$14,698.26	
Total	1727.9 Mbf				\$370,806.69	÷ 125.0 acres = \$2,966.45/Acre
<u>Unit 5-5 - 5-5</u>						
Sugar Pine	0.2 MBF	Χ	\$31.80	=	\$6.36	
White Fir	246.0 MBF	Х	\$143.80	=	\$35,374.80	
Douglas Fir	174.0 MBF	Χ	\$384.10	=	\$66,833.40	
Western Hemlock	20.0 MBF	Χ	\$133.80	=	\$2,676.00	
Ponderosa Pine	0.8 MBF	Χ	\$31.70	=	\$25.36	
Incense-cedar	11.0 MBF	Х	\$232.20	=	\$2,554.20	

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORM05-TS-2021.0008

Round Mountain South

Total	452.0 Mbf		-		\$107,470.12	÷ 30.0 acres = \$3,582.34/Acre
<u>Unit 5-6 - 5-6</u>						
Sugar Pine	4.0 MBF	Χ	\$31.80	=	\$127.20	
White Fir	461.0 MBF	Χ	\$143.80	=	\$66,291.80	
Douglas Fir	197.0 MBF	Χ	\$384.10	=	\$75,667.70	
Western Hemlock	41.0 MBF	Χ	\$133.80	=	\$5,485.80	
Ponderosa Pine	0.2 MBF	Χ	\$31.70	=	\$6.34	
Incense-cedar	14.0 MBF	Χ	\$232.20	=	\$3,250.80	
Total	717.2 Mbf				\$150,829.64	÷ 46.0 acres = \$3,278.91/Acre
<u>Unit 7-1 - 7-1</u>						
White Fir	1,066.0 MBF	X	\$143.80	=	\$153,290.80	
Douglas Fir	231.0 MBF	X	\$384.10	=	\$88,727.10	
Incense-cedar	48.0 MBF	Χ	\$232.20	=	\$11,145.60	
Total	1345.0 Mbf				\$253,163.50	÷ 57.0 acres = \$4,441.46/Acre
<u>Unit 7-2 - 7-2</u>	40.0 MPE	V	#04.00		#040.00	
Sugar Pine	10.0 MBF	X	\$31.80	=	\$318.00	
White Fir	802.0 MBF	X	\$143.80	=	\$115,327.60	
Douglas Fir	220.0 MBF	Х	\$384.10	=	\$84,502.00	
Incense-cedar	43.0 MBF	X	\$232.20	=	\$9,984.60	
Total	1075.0 Mbf				\$210,132.20	÷ 55.0 acres = \$3,820.59/Acre
<u>Unit 7-3 - 7-3</u>						
White Fir	302.0 MBF	Х	\$143.80	=	\$43,427.60	
Douglas Fir	96.0 MBF	Х	\$384.10	=	\$36,873.60	
Western Hemlock	6.0 MBF	X	\$133.80	=	\$802.80	
Incense-cedar	11.0 MBF	Х	\$232.20	=	\$2,554.20	
Total	415.0 Mbf				\$83,658.20	÷ 17.0 acres = \$4,921.07/Acre

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORM05-TS-2021.0008

Round Mountain South

<u>Unit 7-4 - 7-4</u>						
White Fir	317.0 MBF	Х	\$143.80	=	\$45,584.60	
Douglas Fir	244.0 MBF	Χ	\$384.10	=	\$93,720.40	
Western Hemlock	12.0 MBF	Х	\$133.80	=	\$1,605.60	
Incense-cedar	9.0 MBF	Х	\$232.20	=	\$2,089.80	
Total	582.0 Mbf		-1	,	\$143,000.40	÷ 24.0 acres = \$5,958.35/Acre
<u>Unit 7-5 - 7-5</u>						
White Fir	97.0 MBF	Х	\$143.80	=	\$13,948.60	
Douglas Fir	66.0 MBF	Χ	\$384.10	=	\$25,350.60	
Western Hemlock	1.0 MBF	Χ	\$133.80	=	\$133.80	
Incense-cedar	4.0 MBF	Χ	\$232.20	=	\$928.80	
Total	168.0 Mbf				\$40,361.80	÷ 7.0 acres = \$5,765.97/Acre
<u>Unit 12-1 - 12-1</u>	40.0 MPF	V	# 4.40.00		# 0.000.40	
White Fir	48.0 MBF	X	\$143.80		\$6,902.40	
Douglas Fir	110.0 MBF	Х	\$384.10	=	\$42,251.00	
Ponderosa Pine	0.2 MBF	Х	\$31.70	=	\$6.34	
Incense-cedar	2.0 MBF	X	\$232.20	=	\$464.40	
Total	160.2 Mbf				\$49,624.14	÷ 10.0 acres = \$4,962.41/Acre
Unit 10 0 10 0						
<u>Unit 12-2 - 12-2</u> Sugar Pine	1.0 MBF	Х	\$31.80	=	\$31.80	
White Fir	50.0 MBF	X	\$143.80	=	\$7,190.00	
Douglas Fir	194.0 MBF	X	\$384.10	=	\$74,515.40	
Ponderosa Pine	0.8 MBF	X	\$31.70	=	\$25.36	
Incense-cedar	23.0 MBF	X	\$232.20	=	\$5,340.60	
Total	268.8 Mbf		Ψ202.20			÷ 23.0 acres = \$3,787.09/Acre
	200.0				ψο, , , σο, , σ	÷ 2010 d0100
<u>Unit 12-3 - 12-3</u>						
Sugar Pine	0.5 MBF	Χ	\$31.80	=	\$15.90	
White Fir	98.0 MBF	Χ	\$143.80	=	\$14,092.40	
Douglas Fir	114.0 MBF	Χ	\$384.10	=	\$43,787.40	
Ponderosa Pine	0.2 MBF	Х	\$31.70	=	\$6.34	
Incense-cedar	6.0 MBF	Х	\$232.20	=	\$1,393.20	

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORM05-TS-2021.0008

Round Mountain South

Total	218.7 Mbf				\$59,295.24	÷ 17.0 acres = \$3,487.96/Acre
<u>Unit 12-4 - 12-4</u>						
White Fir	99.0 MBF	Χ	\$143.80	=	\$14,236.20	
Douglas Fir	132.0 MBF	Χ	\$384.10	=	\$50,701.20	
Western Hemlock	0.3 MBF	Χ	\$133.80	=	\$40.14	
Incense-cedar	2.0 MBF	Χ	\$232.20	=	\$464.40	
Total	233.3 Mbf				\$65,441.94	÷ 14.0 acres = \$4,674.42/Acre
<u>Unit 13-2 - 13-2</u>						
Sugar Pine	1.0 MBF	Χ	\$31.80	=	\$31.80	
White Fir	24.0 MBF	Χ	\$143.80	=	\$3,451.20	
Douglas Fir	132.0 MBF	Χ	\$384.10	=	\$50,701.20	
Ponderosa Pine	3.0 MBF	Χ	\$31.70	=	\$95.10	
Incense-cedar	20.0 MBF	Χ	\$232.20	=	\$4,644.00	
Total	180.0 Mbf		,,		\$58,923.30	÷ 12.0 acres = \$4,910.28/Acre
<u>Unit 31-10 - 31-10</u>						
Sugar Pine	2.8 MBF	Х	\$31.80	=	\$89.04	
White Fir	81.0 MBF	X	\$143.80	=	\$11,647.80	
Douglas Fir	82.0 MBF	X	\$384.10	=	\$31,496.20	
Ponderosa Pine	64.0 MBF	X		=	\$2,028.80	
Total -	229.8 Mbf					÷ 15.0 acres = \$3,017.46/Acre
<u>Unit 31-4 - 31-4</u>			_			
White Fir	19.0 MBF	Х	\$143.80	=	\$2,732.20	
Douglas Fir	12.0 MBF	Х	\$384.10	=	\$4,609.20	
Western Hemlock	12.0 MBF	Х	\$133.80	=	\$1,605.60	
Incense-cedar	0.8 MBF	X	\$232.20	=	\$185.76	
Total	43.8 Mbf				\$9,132.76	\div 5.0 acres = \$1,826.55/Acre

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORM05-TS-2021.0008

Round Mountain South

<u>Unit 31-5 - 31-5</u>						
White Fir	20.0 MBF	Х	\$143.80	=	\$2,876.00	
Douglas Fir	22.0 MBF	Х	\$384.10	=	\$8,450.20	
Western Hemlock	42.0 MBF	Χ	\$133.80	=	\$5,619.60	
Incense-cedar	0.6 MBF	Χ	\$232.20	=	\$139.32	
Total	84.6 Mbf				\$17,085.12	÷ 12.0 acres = \$1,423.76/Acre
<u>Unit 31-6 - 31-6</u>	000 0 MPF	.,	# 440.00		400 700 10	
White Fir	228.0 MBF	X	\$143.80	=	\$32,786.40	
Douglas Fir	107.0 MBF	Х	\$384.10	=	\$41,098.70	
Western Hemlock	122.7 MBF	Χ	\$133.80	=	\$16,417.26	
Ponderosa Pine	8.0 MBF	Χ	\$31.70	=	\$253.60	
Incense-cedar	10.0 MBF	Χ	\$232.20	=	\$2,322.00	
Total	475.7 Mbf				\$92,877.96	÷ 38.0 acres = \$2,444.16/Acre
<u>Unit 31-7 - 31-7</u>			_		_	
White Fir	435.0 MBF	Χ	\$143.80	=	\$62,553.00	
Douglas Fir	193.0 MBF	Χ	\$384.10	=	\$74,131.30	
Incense-cedar	12.0 MBF	Χ	\$232.20	=	\$2,786.40	
Total	640.0 Mbf				\$139,470.70	÷ 28.0 acres = \$4,981.10/Acre
<u>Unit 32-1 - 32-1</u>	0.0 MPF	V	#04.00		****	
Sugar Pine	8.0 MBF	X	*	=	\$254.40	
White Fir	533.0 MBF	Х	\$143.80	=	\$76,645.40	
Douglas Fir	159.0 MBF	Χ	\$384.10	=	\$61,071.90	
Ponderosa Pine	296.0 MBF	Χ	\$31.70	=	\$9,383.20	
Incense-cedar	4.0 MBF	Х	\$232.20	=	\$928.80	
Total	1000.0 Mbf				\$148,283.70	\div 63.0 acres = \$2,353.71/Acre
Unit 20 4 20 4						
<u>Unit 32-4 - 32-4</u>	202.0 MPF	~	¢1.42.00		\$56.360.60	
White Fir	392.0 MBF	X	\$143.80	=	\$56,369.60	
Douglas Fir	43.0 MBF	X	\$384.10	=	\$16,516.30	
Incense-cedar	0.2 MBF	X	\$232.20	=	\$46.44	
Total	435.2 Mbf				\$72,932.34	÷ 17.0 acres = \$4,290.14/Acre

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORM05-TS-2021.0008

Round Mountain South

<u>Unit 32-4B - 32-4B</u>						
White Fir	106.0 MBF	Χ	\$143.80	=	\$15,242.80	
Douglas Fir	15.0 MBF	Χ	\$384.10	=	\$5,761.50	
Total	121.0 Mbf				\$21,004.30	÷ 5.0 acres = \$4,200.86/Acre
Lizit DOWO4 DOWO4						
<u>Unit ROW31 - ROW31</u> Sugar Pine	3.0 MBF	Х	\$31.80	=	\$95.40	
White Fir	67.0 MBF	X	\$143.80	=	\$9,634.60	
Douglas Fir	106.0 MBF	X	\$384.10	=	\$40,714.60	
Western Hemlock	6.0 MBF	X	\$133.80		\$802.80	
				=		
Ponderosa Pine	28.0 MBF	X	•	=	\$887.60	
Incense-cedar	12.0 MBF	X	\$232.20	=	\$2,786.40	0.0 040.007.40/4
Total	222.0 Mbf				\$54,921.40	÷ 3.0 acres = \$18,307.13/Acre
Unit ROW32 - ROW32						
White Fir	13.0 MBF	Х	\$143.80	=	\$1,869.40	
Douglas Fir	19.0 MBF	Х	\$384.10	=	\$7,297.90	
Ponderosa Pine	15.0 MBF	Х	\$31.70	=	\$475.50	
Incense-cedar	0.1 MBF	Х	\$232.20	=	\$23.22	
Total	47.1 Mbf		-		\$9,666.02	± 1.0 acres = \$9,666.02/Acre
Unit RVM31 - RVM31						
White Fir	5.0 MBF	Χ	\$143.80	=	\$719.00	
Douglas Fir	15.0 MBF	Χ	\$384.10	=	\$5,761.50	
Incense-cedar	1.0 MBF	Χ	\$232.20	=	\$232.20	
Total	21.0 Mbf				\$6,712.70	÷ 1.0 acres = \$6,712.70/Acre
Unit RVM5 - RVM5						
White Fir	2.0 MBF	Х	\$143.80	=	\$287.60	
Douglas Fir	10.0 MBF	X	\$384.10	=	\$3,841.00	
Ponderosa Pine	0.3 MBF	X	_	=	\$9.51	
Incense-cedar	2.0 MBF	X	\$232.20	=	\$464.40	
Total	14.3 Mbf		Ψ202.20			± 1.0 acres = \$4,602.51/Acre
					+ .,002.01	÷ 1 333 22
Unit RVM6 - RVM6						
White Fir	2.0 MBF	Χ	\$143.80	=	\$287.60	

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

EXHIBIT B / PRE-SALE

5450-3

Contract No.

ORM05-TS-2021.0008

Round Mountain South

Unit RVM6 - RVM6						
Douglas Fir	16.0 MBF	Χ	\$384.10 :	=	\$6,145.60	
Incense-cedar	1.0 MBF	Χ	\$232.20 :	=	\$232.20	
Total	19.0 Mbf				\$6,665.40 ÷ 1.0 acres = \$6,665.40/Acre	_
<u>Unit RVM7 - RVM7</u>						
White Fir	12.0 MBF	X	\$143.80	=	\$1,725.60	
Douglas Fir	81.0 MBF	Χ	\$384.10 :	=	\$31,112.10	
Incense-cedar	12.0 MBF	Χ	\$232.20 :	=	\$2,786.40	
Total	105.0 Mbf				\$35,624.10 : 1.0 acres = \$35,624.10/Acre	_
Unit RVM9 - RVM9						
White Fir	3.0 MBF	Χ	\$143.80 :	=	\$431.40	
Douglas Fir	6.0 MBF	Χ	\$384.10	=	\$2,304.60	
Ponderosa Pine	3.0 MBF	Х	\$31.70 :	=	\$95.10	
Total	12.0 Mbf		ı		\$2,831.10 ÷ 1.0 acres = \$2,831.10/Acre	_



UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT ROUND MOUNTAIN SOUTH TIMBER SALE MEDFORD DISTRICT

ORM05-TS-2021.0008 TRACT NO.

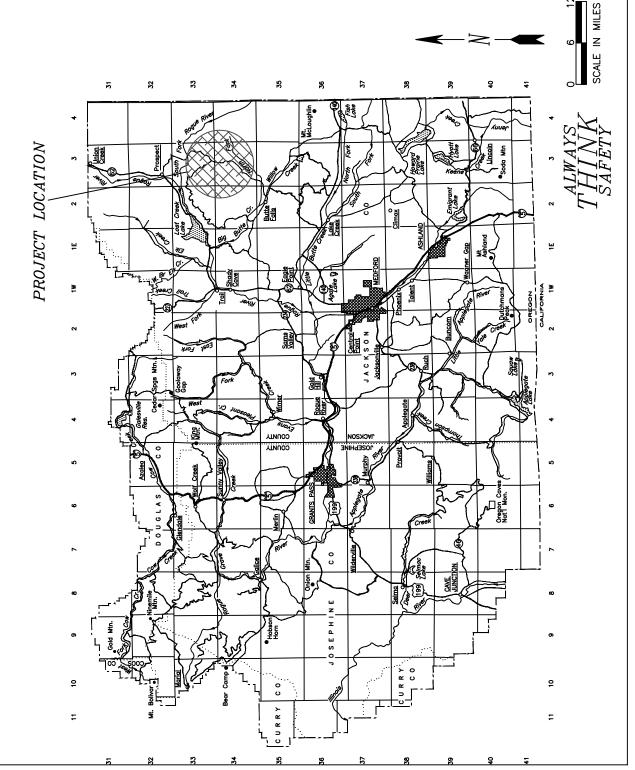


EXHIBIT C-1SHEET

Exhibit No.	Description
C-1	TITLE SHEET
C-2	ROAD RENOVATION MAPS
C-3	ROADSIDE VEGETATION MAINTENANCE MAPS
C-4	ESTIMATE OF QUANTITIES
C-5	SPECIFICATION SHEET
C-6	TYPICAL ROAD DATA
C-7	ROAD SURFACING & CURVE WIDENING SECTIONS
C-8	TYPICAL TURNOUT SECTION
6 - 2	ROAD JUNCTION SURFACING APRON SECTION
C-10	CULVERTLIST
C-11	CULVERT INSTALLATION DETAILS
C-12	CULVERT BAND DETAILS
C-13	ARMORED WATER DIP CONSTRUCTION DETAILS
C-14	DRAINAGE & EROSION CONTROL DETAILS
C-15	ROADSIDE BRUSHING DETAILS
C-16	ROADSIDE VEGETATION MAINTENANCE DETAILS
C-17	33-3E-31.08 PLAN & PROFILE
C-18	33-3E-32.02 B PLAN & PROFILE
C-19	VINE MAPLE QUARRY PLAN
C-20	RENOVATION & CONSTRUCTION WORK LIST
C-21	ROAD SPECIFICATIONS
C-22	SPECIAL PROVISIONS

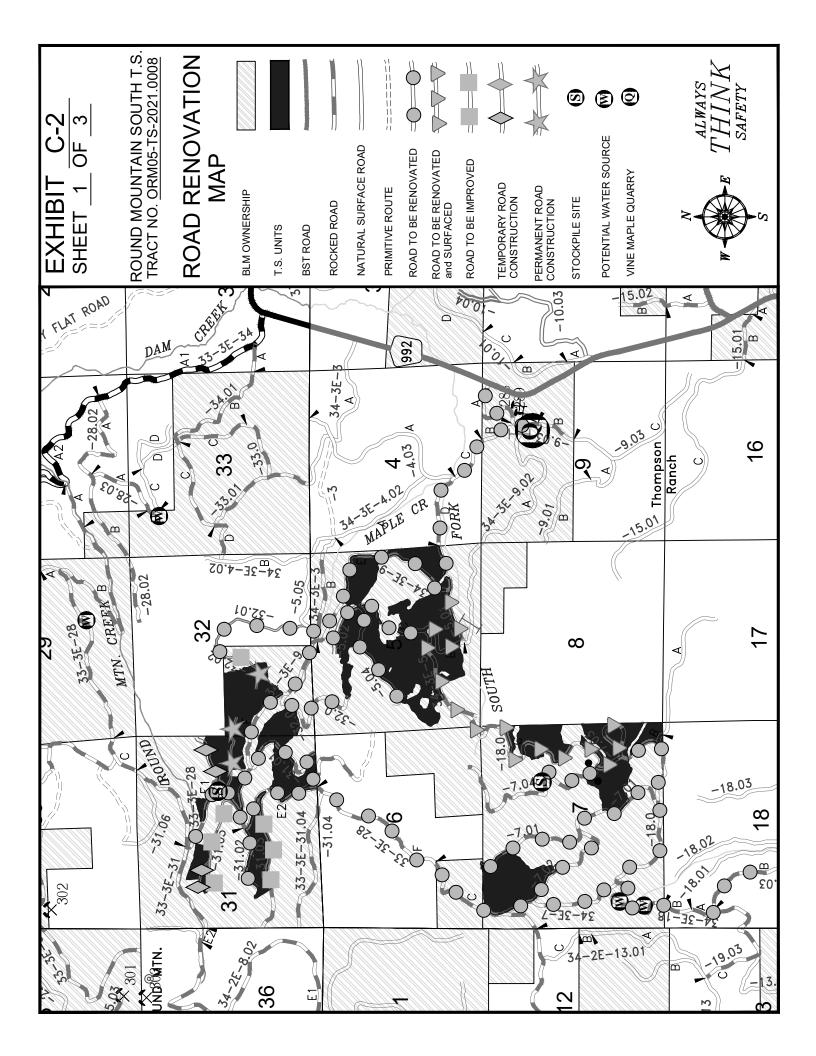
REV. NO. DESCRIPTION DATE APPROV. UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD, OREGON

ROUND MOUNTAIN SOUTH

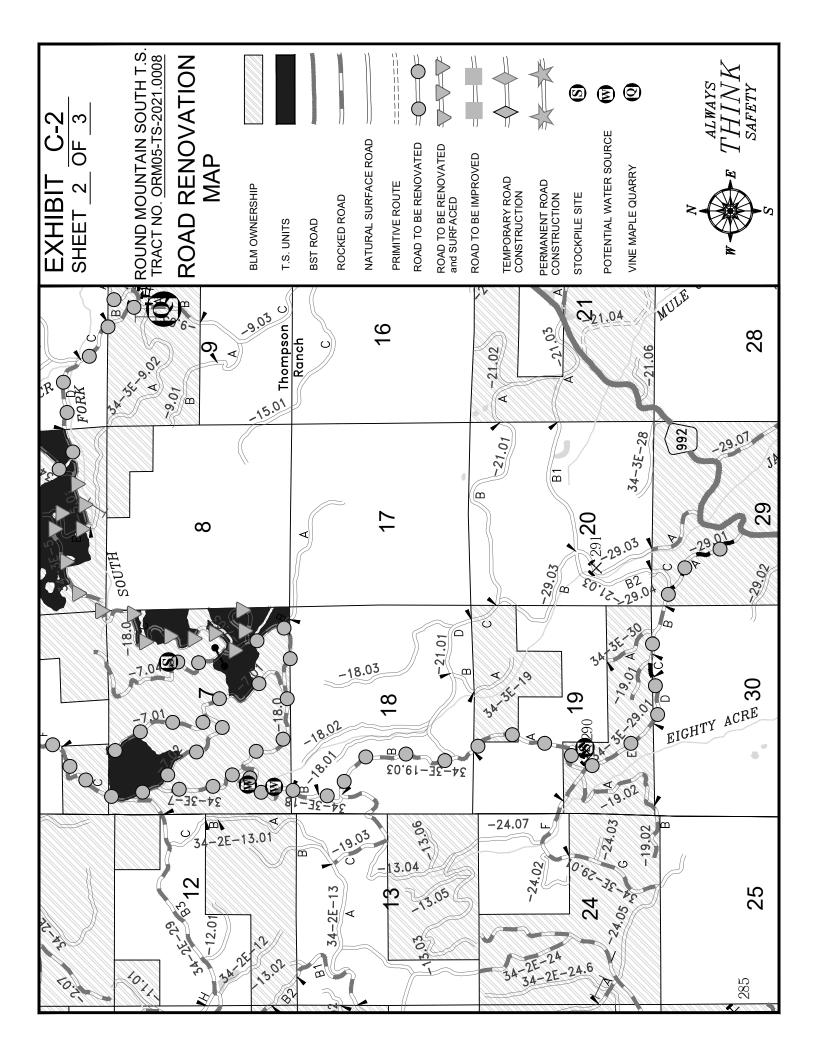
SHEET			
TITLE	DESIGNED	REVIEWED	

DRAWN JAB	SCALE	SCALE AS SHOWN
NATE JULY 2021	SHEET	1 OF 1
DRAWING NO. ORN	105-TS-2	ORM05-TS-2021.0008-C1

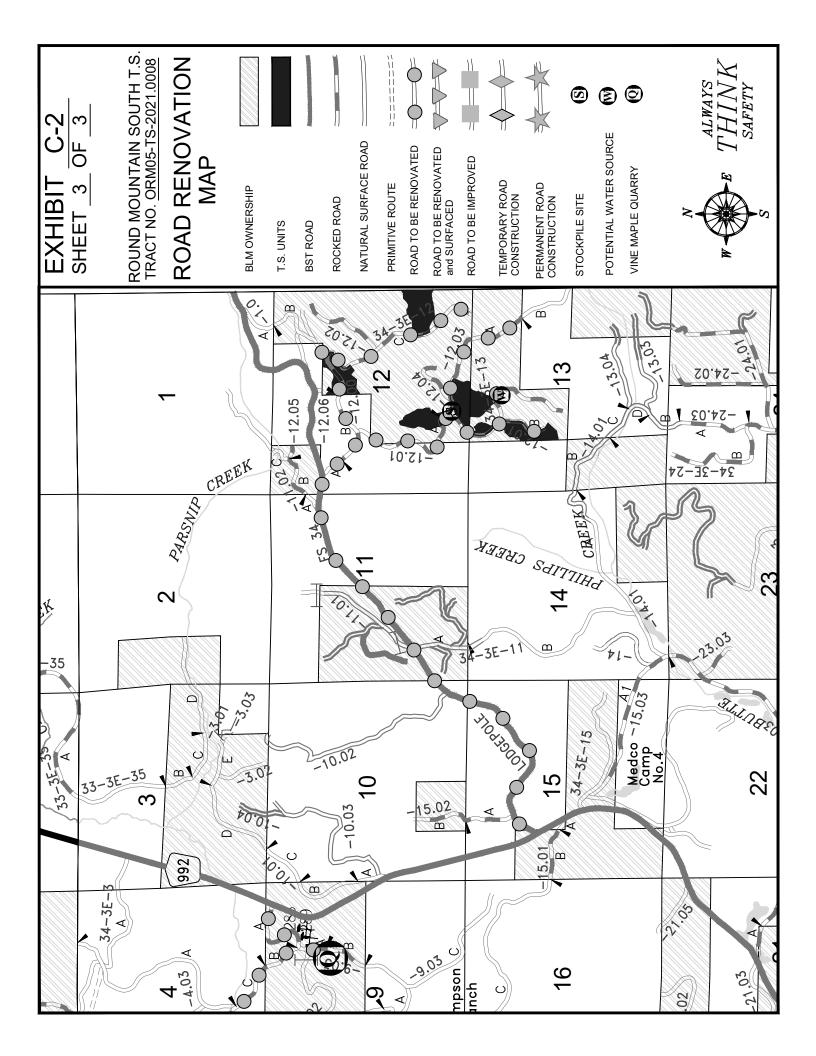




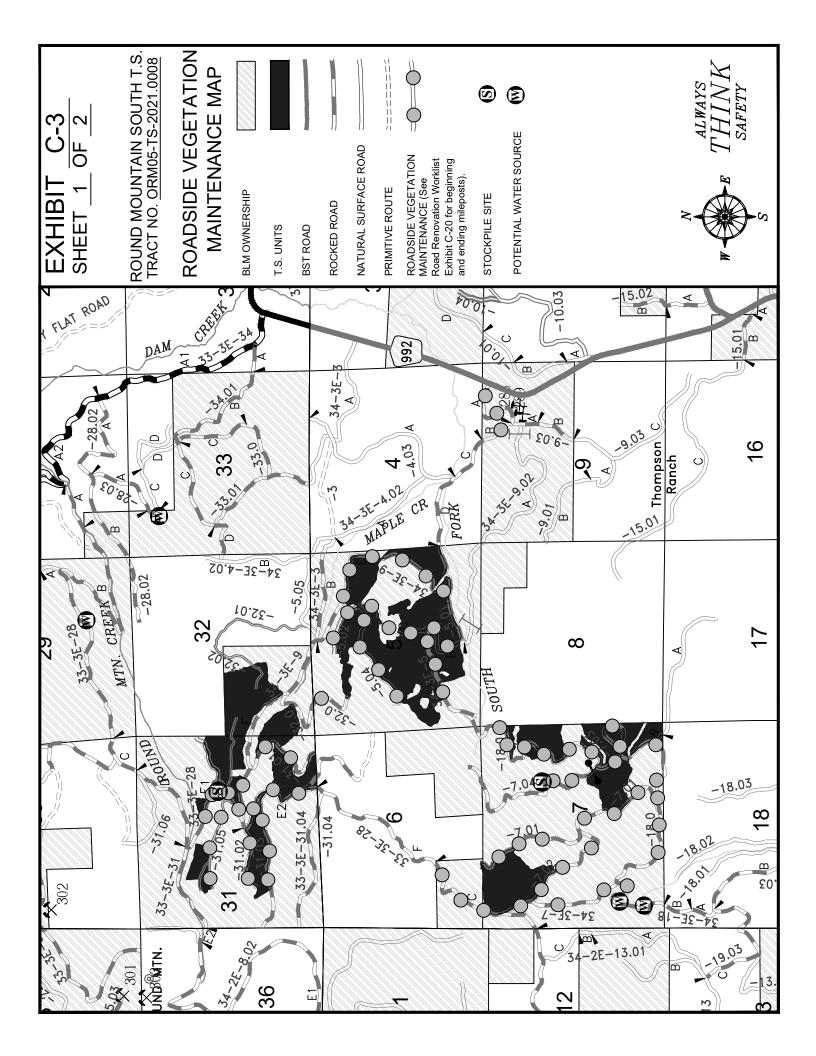




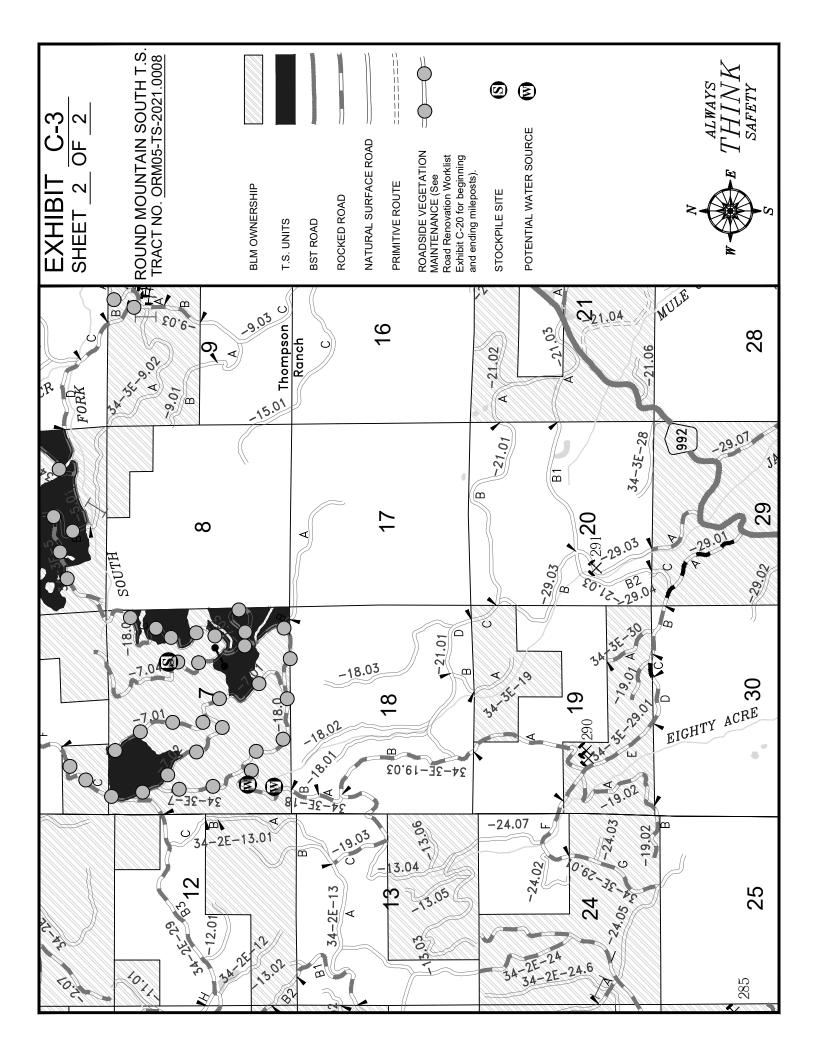














0 4	OF 2
EXHIBIT	SHEET 1

ROUND MOUNTAIN SOUTH TIMBER SALE

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			*:	NBBING	EXCA (Inc	EXCAVATION (Includes		ORF	₹UG,	CORRUGATED M PIPE	ME	ETAL	NOITA	EMENT				AGGR	AGGREGATE**	*	NOIL	3;					TAE
	V		**F	ษย	<u>v</u>	slides)							//	- -							.\ \	NC	Я				ΓΛΙ
ROAD NUMBER	PON-	OT	НЕТР) QNA :	5	(2)			0)	SIZE			ENO	ОВЧ	ATSI NAM	ЯТ2 । ЯОЧІ		BASE A	BOAR		TABILI	AN∃TI	CATTE				VE CUI
	1		137	CLEARING	ROCK	common 18"	z - 2	3" 24"		30" 36"	" 42"	.48"	ROAD R	MI QAOЯ	NEW CON	NEW CON	JATSNOC BTAW	CREENED 4" MINU	CRUSHE	SPLASH P	SOIF 8.			ROADSIDE	REMOV CONSTRL	CONSTRU	REMO
SPECIFICATION NO				200	300	300	400		10 40	00 400	004	400	200	200	300	300	200	006		1400	1800	500 2	2100 21	2100 50	500 1700	1700	0
NUM	MP/STA	MP/STA	MILE/STA	Ĺ	C.Y.	C.Y.	L.F.	F. L.F.	F. L.F.		ا نــ			MILE	STA	STA	EA	C.Y.	Н	Н			Н	Н	Н	Н	EA
33-3E-28.00 E1	0.00	0.70	0.70	0.75									0.70								0.20	0.51 0	0.70				
33-3E-28.00 E2-F	00.00	1.55	1.55	06.0									1.55								0.25	0.61	.55				
33-3E-31.01	0.00	0.57	0.57	0:30			34	+			9		0.57				-	40	06	2	0.30	0.21	0.5	57			_
33-3E-31.02	00.00	0.37	0.37	0.55									0.37								0.15	0.37	0.0	37	_		
33-3E-31.03	0.00	09.0	09:0	1.45										09.0							0.75 (09.0	0.6	09	_		
33-3E-31.05	0.00	0.56	0.56	1.35										0.56							0.70	0.56	0.5	26	-	25	
33-3E-31.07 A	0.00	0.13	0.13										0.13									0	0.13				
33-3E-31.08 (NEW)	00+0	22+87	22+87	2.10		1136									22+87		2	1316	658		1.05						
33-3E-32.00	0.00	0.70	0.70	0.15			64	+				70	0.70						06	_د	0.40	0.10	0.7	20			
33-3E-32.01	00.00	0.61	0.61				_	_					0.61									3	0.61				
33-3E-32.02 A1	0.00	0.07	0.07										0.07									0	0.07	•	1		
33-3E-32.02 A2	0.07	0.28	0.21	0.15									0.11	0.10							0.10	<u>ာ</u>	0.21		1	2	
33-3E-32.02 B (NEW)	0+00 (7+37	7+37	0.70		110									7+37						0.35					7	
34-2E-29.00 C	0.00	0.54	0.54	0.65								09	0.54						20	1 (0.30	0.49 0.	.54				
34-3E-01.00 B	0.00	0.02	0.02										0.02									0	0.02				
34-3E-03.00 B	0.00	0.02	0.02										0.02									0	0.02				
34-3E-05.00	0.00	0.55	0.55	0.60			36	9					0.55						908	1 (0.25 (0.39 0.	.55				
34-3E-05.01	0.00	0.31	0.31				74	+					0.31						481	2 (0.20	0	0.31				
34-3E-05.02	0.00	0.32	0.32	0.50									0.32				2	80			0.15 (0.32	0.3	32	1	15	
34-3E-05.04	0.00	99.0	99.0	1.00									99.0								0.25 (99.0	9.0	99	1	30	
34-3E-05.05	0.00	0.07	0.07										0.07									0	0.07				
34-3E-07.00	0.00	0.73	0.73	0.70			72	2 72	2				0.73						80	4 (09.0	0.55 0	0.73				
34-3E-07.01	0.00	1.40	1.40	1.85		200	32	2 40		46	-		1.40	\dashv			2	80	200	3	1.00	1.26 0	0.70 0.7	.70		\dashv	2
PAGE 1 TOTALS			11.26	13.70		1746		312 112	7	46	9 9	130	9.43	1.26	30+24		7	1516	2455	16	7.00 6	6.63 6	.21 4.	48 5	5 4	82	3
* FOR INFORMATIONAL	MATIO	l	USE O	ONLY																							L

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

**Indicate gradation.

ITEM 1200	SIZE GRADE 1 1/2inch C,C-1 1 inch D,F 3/4inch E,E-1
ITEM 900	SIZE GRADE 4 inch (A) 3 inch (B) 2 inch (C) 1 1/2 inch (D)

*** Total length includes permanent and temporary roads to be constructed.

**** Armored water dip aggregate quantities calculated at 40 CY per AWD and are accounted for in aggregate column under 4" minus grade A and 20 CY per AWD are accounted under crushed surface grade C-1. AWDs on natural surface will not be surfaced with 20 CY of crushed surfacing.

***** Quantities costs covered for under splash pads under drainage.



ESTIMATE OF QUANTITIES*

SCALE: NONE	SHEET: 1 OF 2	
JAB	JULY 2021	ORM05-TS-2021 0008-C4
DRAWN:	DATE:	ON SINIMARC

EXHIBIT C4	SHEET 2 OF 2	ID MOUNTAIN SOUTH TIMBER SALE
		ROUND M

																									_				
ТЯЗV.	VE CUL	REMO	1		EA																					က		3	
2ЯАВ ЯЭI	raw to	UATSI	СОИ	1700	EA																6	10				82	19	101	
ВВІСАDE	ICT BAI	JATSN	coı	1700	EA																	1				4	1	5	
SICADE	AAAB 3	EWΟΛ	Я	200	EA		-															1				5	2	7	
IING - CHIB	нѕпян	OSIDE	JAOA	2100	MILE		0.43	0.40			0.20			09.0	69.0	0.15				2.43						4.48	4.90	9.38	
shing -	UAB 30 HETTAC		DЯ	2100	MILE	0.68			4.00	0.02	09.0	0.08	1.67	0.65			3.52	1.72	1.78			0.24				6.21	14.96	21.17	
ETATION JCE	e Vegi		ОЯ	200	MILE	0.68	0.43	0.36	1.79		0.78						1.88									6.63	5.92	12.55	
NOITA:	ZIJI841	SOIF 8.	3	1800	ACRE	0.25	0.15	0.50	1.05		0.75	0.50					1.10				0.45	0.20				7.00	4.95	11.95	
*		9 H2A. *£ 22 <i>4</i>		1400	EA			-	က		2						4									16	10	26	
AGGREGATE**	ED E	C-1 YCE G		1200	C.Y.		929	20	80		549		20				2238									2455	3836	6291	Į S
AGGR	3SA8	MINU ENED WADE	SCKE	006	C.Y.																					1516		1516	AIWAVC
S**** KWOKED				200	EA																					7		7	
- ИОПЭЦ УЯУ	JAT2I JAO9		NEM	300	STA																9+50	12+67					22+17	22+17	
- NOTION - TNE	JATSI BNAM		NEM	300	STA																					30+24		30+24	
/EMENT	/ОЯЧ	MI Q	ЮЯ	200	MILE																					1.26		1.26	
NOITAV	ENO	A DA	ОЯ	200	MILE	0.68	0.43	0.40	4.00	0.02	08.0	0.08	1.67	1.25	69.0	0.15	3.52	1.72	1.78	2.43						9.43	19.62	29.05	
AL		NUSP(18" F	400	. L.F.				20								10									0	30	0 30	
l ⊢		-	4 0	400 400	F. L.F.												20									60 130	20	110 130	
CORRUGATED ME' PIPE		- 1	30 42	400 40	L.F. L.F.												5									46 6	2	46 11	
GATEI	SIZE		ر الا	400 40	L.F. L.				20															-	-	4	20	50 4	
RRU	0,		44 2	400 40	L.F. L.				40 5								74									7			
8				00	L.F. L.			ω			2	0														312 112	326 114	638 226	
N O			NO MONION		C.Y.			38	72		72	80					64									1746 31	32	1746 63	
EXCAVATION			X200X		C.Y.																					17		17	
ш выпавию	AND G			200 3		1.00	09.0	0.50	2.60		1.10	2.00					2.75				06.0					13.70	11.45	25.15	7777.0
	ИСТН	137			MILE/STA A	0.68	0.43 0	0.40	4.00	0.02	0.80	0.08	1.67	1.25	69.0	0.15	3.52 2	1.72	1.78	2.43	0+20 0	12+67				11.26	20.04 1	31.30 28	1
***					-																	\vdash				7	20	31	7.77
	OT				MP/STA	0.68	0.43	0.40	4.00	0.02	0.80	0.08	1.67	1.25	0.69	0.15	3.52	1.72	1.78	2.43	9+20	12+67							77.07
	ROM:	ł		Š.	MP/STA	00.00	0.00	0.00	0.00	0.00	0.00	00.0	0.00	0.00	0.00	0.00	00.00	00.00	00.00	00.0	00+0	0+00							
	ROAD NUMBER			SPECIFICATION NO	ROAD NUMBER	34-3E-07.02	34-3E-07.03	34-3E-07.04	34-3E-09.00 A-F	34-3E-09.02 A	34-3E-09.02 B-C	34-3E-09.03 A	34-3E-12.00 A-C	34-3E-12.01 A-B	34-3E-12.03 A	34-3E-13.00	34-3E-18.00 A-C	34-3E-19.03 A-B	34-3E-29.01 A-E	FS 34	Temp Road 31-5	Temp Road 32-1				PAGE 1 TOTALS	PAGE 2 TOTALS	PROJECT TOTALS	* COMPANION AND A STATE OF THE

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

**Indicate gradation.

00:	GRADE C,C-1 D,F E,E-1
ITEM 1200	SIZE 1 1/2inch 1 inch 3/4inch
006	GRADE (A) (B) (C) (D)
ITEM	SIZE 4 inch 3 inch 2 inch 11/2 inch

*** Total length includes permanent and temporary roads to be constructed.

**** Armored water dip aggregate quantities calculated at
40 CY per AWD and are accounted for in aggregate column
under 4" minus grade A and 20 CY per AWD are accounted
under crushed surface grade C-1. AWDs on natural surface
will not be surfaced with 20 CY of crushed surfacing.

will not be suitabled with 20 Or or district suitable.
***** Quantities costs covered for under splash pads under drainage.

ESTIMATE OF QUANTITIES*

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

DATE

MEDFORD, OREGON

DRAWN:	JAB	SCALE: NONE
DATE:	JULY 2021	SHEET: 2 OF 2
DRAWING NO.	ORM05-TS-2021.0008-C4	

EXHIBIT C-5 SHEET 1 OF 3 ROUND MOUNTAIN SOUTH T.S.

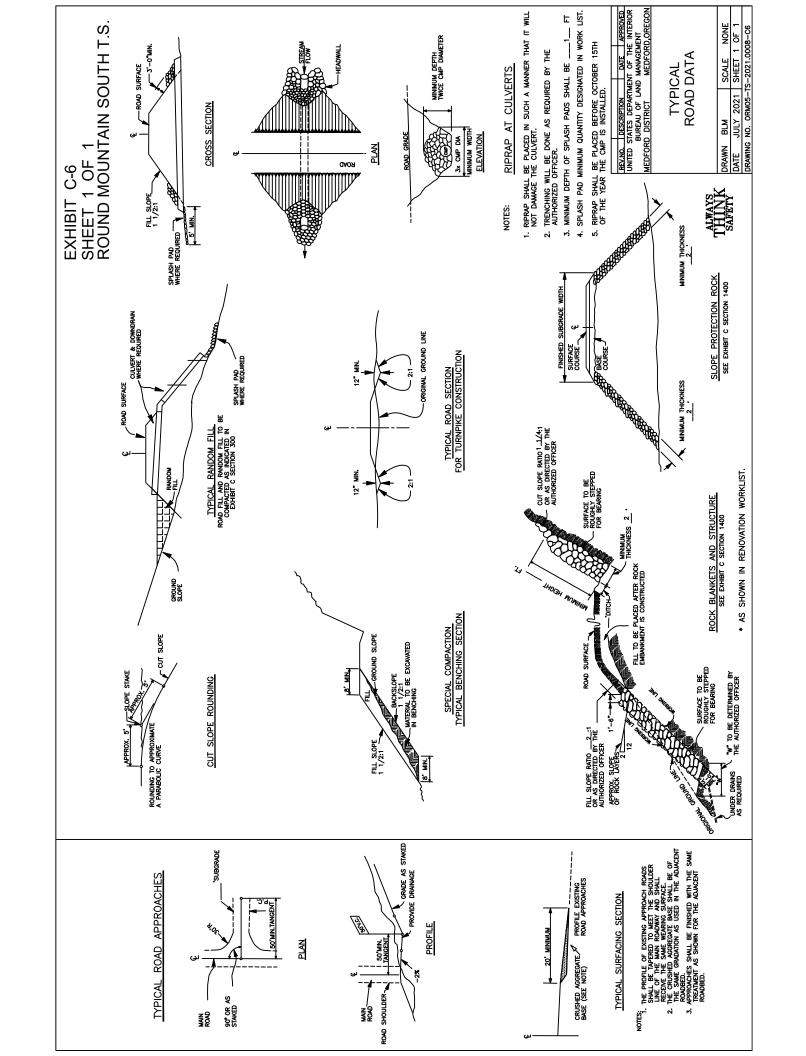
							3		 - !									2		
	STATION	TO STATION		TYPICAL	ALLIGNMENT ROAD WID IH (1-3)	ROAD WIL	(5-L) H (GRADIENT		CLEAR	CLEARING WIDTH	JIH 			ns	SURFACING (4,	(4)			
ROAD NUMBER	OR	OR	MILEOR	SECTION	MAXIMUM	1000	J.	MAXIMUM	MAXIMUM	γ0		EXISTING ROAD(S)	1	BASE COURSE	JURSE		SURFA	SURFACE COURSE	JRSE	REMARKS
	MILE POST	MILE POST	- 1	TYPE	CURVE			FAVORABLE #		TOP TOE CUT FILL		~	MINIMUM WIDTH	COMP	TYPE (2) GRADING	DING WID	MINIMUM COMP. WIDTH DEPTH	-	TYPE (2) GRADING	
33-3E-28.00 E1	0.00	0.70	0.70	9		15	က				9	9								Roadside Vegetation Maintenance
33-3E-28.00 E2-F	0.00	1.55	1.55	9		15	3				9	9								Roadside Vegetation Maintenance
33-3E-31.01	0.00	0.57	0.57	9		15	3				9	9								Roadside Vegetation Maintenance
33-3E-31.02	0.00	0.37	0.37	4		15	0				9	9								Roadside Vegetation Maintenance
33-3E-31.03	0.00	09:0	09:0	1		15	0				9	9								Roadside Vegetation Maintenance
33-3E-31.05	0.00	0.56	0.56	3		15	0				10	10								Road Improvement
33-3E-31.07	0.00	0.13	0.13	9		15	е													
33-3E-31.08	00+0	2+70	2+70	4		16	0		,-	10 5			15'	₽	O	14.	4.	_		New Construction - Outslope Right
	2+70	19+69	16+99	2		16	3		,-	10 5			15'	₽	U	14.	4.	_		New Construction - Inslope Left
	19+69	22+87	3+18	4		16	3		, -	10 5			15'	8	ပ	14'	4' 4"			New Construction - Outslope Right
33-3E-32.00	0.00	0.70	0.70	9		15	3				9	9								Roadside Vegetation Maintenance
33-3E-32.01	0.00	0.61	0.61	4		15	0													
33-3E-32.02 A1	0.00	0.07	0.07	4		15	0													
33-3E-32.02 A2	0.07	0.28	0.21	3		15	0				10	10								Road Improvement
33-3E-32.02 B	0.28/0+00	7+37	7+37	3		16	0			10 5										New Construction - Outslope Left
34-2E-29.00 C	0.00	0.54	0.54	9		16	3				9	9								Roadside Vegetation Maintenance
34-3E-01.00 B	0.00	0.02	0.02	4		15	0													
34-3E-03.00 B	0.00	0.02	0.02	4		15	0													
34-3E-05.00	0.00	0.55	0.55	9		15	3				9	9				14'	4' 4"			Roadside Vegetation Maintenance
CUT SLOPE		CUT SLOPE SURFACE WIDTH	EWIDTH	SURFACING SHOPE 15:7	OPE 1.5 :1	CUT SLOPE	. PE			1. EXTR ADDA ADDA ADDA FILLS 6FT.V CURV WHE	RA SUBGRA TO EACH FII S OF 1-6FT. & WIDEN THE VES AS FOLL IN THE DEG	NOTES DE WIDTHS LL SHOUDER 1 \$ 2FT.FOR FILLS LOWS: LOWS: REE OF CURVE	NOTES 1. EXTRA SUBGRADE WIDTHS ADD TO EACH FILL SHOUDER HET FOR FILLS OF LAFT & STITCOR PILLS OVER GITT WIDTHS SHOUDER OF ALL CHANGES AS POLICIANS. WHEN THE DESTREE OF CURVE EQUALS 7.27 ADD 1FT.							
11 🗖 1	FILL SLOPE	₩	\$	FILL SLOP		SUBGRA	3 % SUBGRADE WIDTH		FILL SLOPE	22 36 494 65,6	35 ADD 2FT. 48 ADD 3FT. 64 ADD 4FT. 96 ADD 5FT.									THINK
TYPICAL GRADING SECTION	NOI	TYPICAL S	TYPICAL SURFACING SECTION	CTION	ı	TYPICAL G	SRADING SECTION	SECTION		MATERIAL	MATERIALS COMMON	, COT	CUT SLOPES	FILL SLOPES 1 1/2:1	S.					
TYPE 1			TYPE 2			I	TYPE 3			SOFI	SOFT ROCK & SHALE SOLID ROCK	HALE 1/	1/2:1	1 1/2:1 ANGLE OF REPOSE	3EPOSE					
								Č			EEDING 60% FACING TYF TRUNROCH	NSTRUCTIC	FULL BENOH CONSTRUCTION IS REQUIRED ON SIDE SLOPES EXCEDING 60%. SURFACIOL TYPE A PITRUN ROCK MATERIAL.	ED ON SIDE		REV. NO.	STATE	DESCRIPTION ES DEPA	RTMENT O	REV. NO. DESCRIPTION DATE APPROV. UNITED STATES DEPARTMENT OF THE INTERIOR
H C C C C C C C C C C C C C C C C C C C		بالر	CUT SLOPE		٧	CUT SLOPE	MIN. BASE COURSE WIDTH MINIMUM WIDTH	T T			RUSHED RO TUMINOUS	OCK MATER CK MATER SURFACE II	——————————————————————————————————————	ĵ.	M	JREAU (OF LANE	MEDFOF	D MANAGEMENT MEL MEDFORD, OREGON	BUREAU OF LAND MANAGEMEN I MEDFORD DISTRICT MEDFORD, OREGON
HTGIW	SURFACING SHOULDER SLOPE 1.5:1		DITCH SUBGRADE WIDTH CROWN SHALL BE 3%	∮ У	STOPE		SURFACE COURSE SUBGRADE WIDTH	DIH DIH	FILL SLOPE		ATURAL. RNOUTS MIDTH 10FT. HOWN ON TH. .OCATED APF	IN ADDITION IE PLANS. PROXIMATEI	F. IMTURALI. 3. TURNOUTS 3. TURNOUTS 4. WIDTH 10FT. IN ADDITION TO SUBGRADE WIDTH,OR AS SHOWN ON THE PLANS. B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.)E WIDTH,OR ON THE RO¢	AS D PLANS.		SPEC	CIFIC/	SPECIFICATION SHEET	HET
TYPICAL SURFACING SECTION	/ ₈	Ĭ	TYPICAL GRADING SECTION	G SECTION	L CDITCH	TYPICAL		SURFACING SECTION	z	4. SUR TURI APPF	RFACING NOUTS, CUR ROACH APRC	VE WIDENIN INS SHALL E	4. SURFACING TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED.							
TYPE 4			TYPE	5			TYPE (9		SEE	SEE SUBSECTION 200	7 200			DRA	DRAWN: JAB				SCALE NONE
															DAT	DATE: JULY 2021	21			SHEET 1 OF 3
															3	WING NO.				UKINIU5-1 3-202 1.0000-00

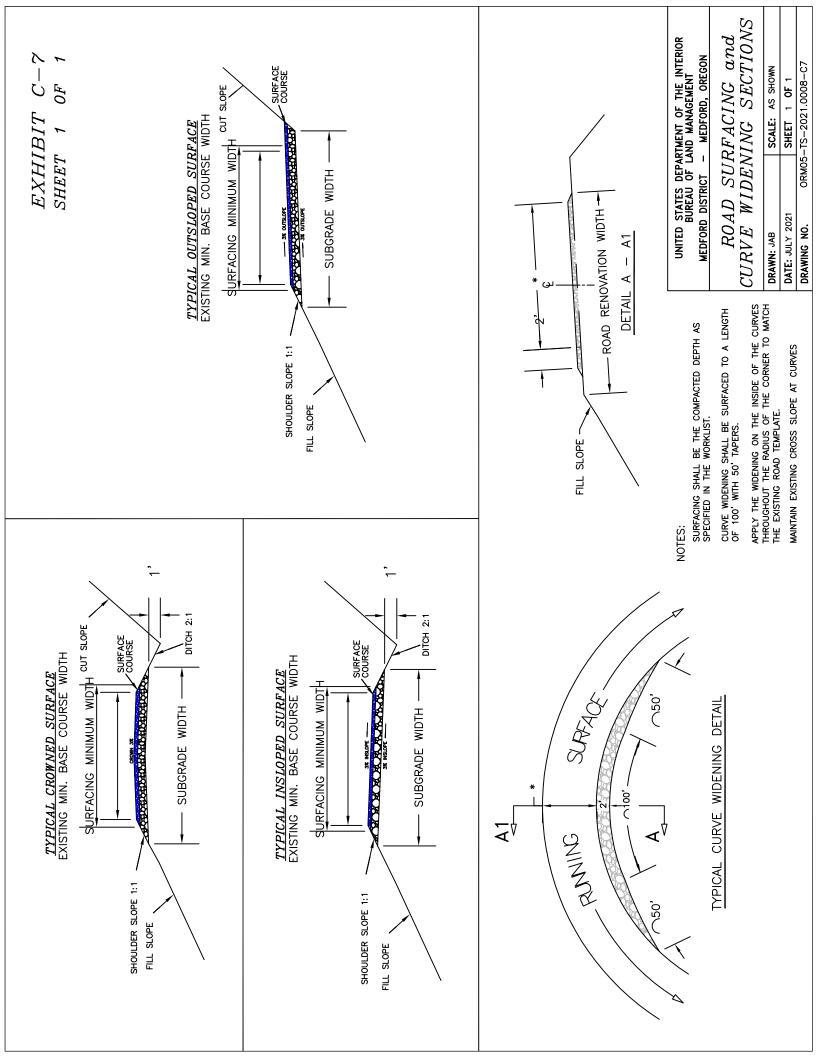
EXHIBIT C-5 SHEET 2 OF 3 ROUND MOUNTAIN SOUTH T.S.

					TNEMNOLL	ROAD WIDTH (1-3)	TH (1-3)	TNEIUPNE	 <u>-</u>	SI FARI	CI FARING WIDTH	E				SURFACING (4)	(4)	<u>ж</u>	NOM DNUC	ROUND MOUNTAIN SOUTH T.S.
	STATION	TO STATION		TYPICAL			6		+		ING WID	EXISTING			8				- -	200
KOAD NUMBEK	OR MILE POST	MILE POST	STATION		DEGREE OF SCURVE	SUBGRADE	DITCH	MAXIMUM MAX	MAXIMUM BE ADVERSE TOP	BEYOND TOP TOE	_{RO} ⁶ ∟		MINIMUM	COMP. TYPE (2)	OURSE TYPE (2) GRADING	ADING MINIT	MINIMUM CO	SURFACE COURSE UM COMP. TYPE (2) GR	COURSE TYPE (2) GRADING	KEMAKKS
34-3E-05.01	00.00	0.31	0.31	9		15	8				9	9				1	14'		٥	Roadside Vegetation Maintenance
34-3E-05.02	0.00	0.32	0.32	8		15	0				9	9								Roadside Vegetation Maintenance
34-3E-05.04	0.00	99.0	99.0	3		15	0				9	9								Roadside Vegetation Maintenance
34-3E-05.05	0.00	0.07	0.07	4		15	0													
34-3E-07.00	0.00	0.73	0.73	9		15	3				9	9								Roadside Vegetation Maintenance
34-3E-07.01	0.00	1.40	1.40	9		15	3				9	9								Roadside Vegetation Maintenance
34-3E-07.02	0.00	89.0	0.68	9		15	3				9	9								Roadside Vegetation Maintenance
34-3E-07.03	0.00	0.43	0.43	9		16	0				9	9				1	14' 6	9	D	Roadside Vegetation Maintenance
34-3E-07.04	0.00	0.40	0.40	9		15	3				9	9								Roadside Vegetation Maintenance
34-3E-09.00 A-B	0.00	0.64	0.64	9		16	3				9	9								Roadside Vegetation Maintenance
34-3E-09.00 C-D	0.64	1.36	0.72	9		16	3													
34-3E-09.00 E-F	1.36	4.00	2.64	9		15	3				9	9								Roadside Vegetation Maintenance
34-3E-09.02 A	0.00	0.02	0.02	9		16	3													
34-3E-09.02 B	0.00	0.35	0.35	9		15	3				9	9				1	14' 4	4"	D	Roadside Vegetation Maintenance
34-3E-09.03 C	0.35	08.0	0.45	3		15	0				9	9								Roadside Vegetation Maintenance
34-3E-09.03	0.00	0.08	0.08	4		16	0													
34-3E-12.00 A-C	0.00	1.67	1.67	9		15	3													
34-3E-12.01 A-B	0.00	1.25	1.25	9		15	3									_				
<u> </u>		CUT SLOPE SURFACE WIDTH		OING		CUT SLOPE	Й			1. EXTR. ADD T. FILLS' 6FT. W CURW WHEI	A SUBGRADI O EACH FILL OF 1-6FT. & 2 INDEN THE IN EST AS FOLLC N THE DEGR	NOTES WIDTHS SHOULDER 1 SPT. FOR FILLS SIDE SHOLDE WWS:	1. EXTRA SUBGRADE WIDTHS ADD TO EXCHTALL SHOULDER 1FT FOR FILLS OF 1-6FT & SPIT FOR FILLS OVER 6FT, WIDTON THE INSUES SHOLDER OF ALL CURVES AS FOLLOWS: WHEN THE BERREE OF CURVE EQUALS 7-34 AND 15T FILES							
3 % SUBGRADE WIDTH	FILL SLOPE	\display \land \l	% N	SHOULDER SLOPE 1.5.:1	9E 1.5 :1	SUBGRAI	3 % —> SUBGRADE WIDTH	FILL SLOPE	LOPE	22-36 22-36 36-46 49-64 65-96	ADD 2FT. 3 ADD 3FT. 4 ADD 4FT. 3 ADD 5FT.									THINK
TYPICAL GRADING SECTION	NOI.	TYPICAL S	TYPICAL SURFACING SECTION	CTION	'-	TYPICAL GRADING SECTION	RADING S	ECTION		MATERIALS	RIALS	CUT SI	CUT SLOPES	FILL SLOPES 1 1/2:1	Ø					1 19 Juc
TYPE 1		.,	TYPE 2			T.	TYPE 3			SOFT	SOFT ROCK & SHALE SOLID ROCK	LE 1/2:1 1/2:1	T 5	1 1/2:1 ANGLE OF REPOSE	EPOSE					
					ē	L 0 0		SHOULE	2. SHOULDER SLOPE 1.5:1		FULL BENCH CONSTRUCTION IS RI EXCEEDING 60%. SURFACING TYPE SURFACING TYPE POTIT BOUND FOR MATERIAL.	STRUCTION WATERIAL.	FULL BENCH CONSTRUCTION IS REQUIRED ON SIDE SLOPES EXCEDENG 69%. A PIT BLUR ROCK MATERIAL. A PIT BLUR ROCK MATERIAL.	D ON SIDE		NNITED	STATE	ES DEPAILOR OF MANIAC	ARTMENT	UNITED STATES DEPARTMENT OF THE INTERIOR UNITED STATES DEPARTMENT OF THE INTERIOR
CUT SLOPE		1	CUTSLOPE	FILL SLOPE		MIN.	MIN. BASE COURSE WIDTH MINIMUM WIDTH	1 1			REENED ROCUSHED TO USHED ROCUMINOUS SI	CON MATERIA K MATERIA JRFACE TR	B. SHID YOLGED YOU WAS TENAL C. SCREENED ROCK MATERIAL. D. CRUSHED ROCK MATERIAL. E. BITUMINOUS SURFACE TREATMENT (BST). F. NATURAL.	Ë				MEDFO	MEDFORD, OREGON	NO
SURFACE WIDTH	SURFACING SHOULDER SLOPE 1.5:1	1.5:1	CH SUBGRADE WIDTH CROWN SHALL BE 3%	У		SUB	SUBGRADE WIDTH		FILL SLOPE		NOUTS DTH 10FT. IN OWN ON THE	ADDITION 1 PLANS. ROXIMATELY	3. VIURNOUTS A WIDTH IOFT IN ADDITION TO SUBGRADE WIDTH,OR AS SHOWN ON THE PLANS. B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.	EWIDTH,OR.	AS J PLANS.		SPE	CIFIC	SPECIFICATION SHEET	SHEET
TYPICAL SURFACING SECTION	/ <u>z</u>	AYT		SECTION	. Сытсн	TYPICAL S	SURFACIN	SURFACING SECTION	_ 1	4. SURF TURN APPR	SURFACING TURNOUTS, CURVE W APPROACH APRONS (CLEARING WIDTH	E WIDENING IS SHALL BE	SURFAGING TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED. CLEARING WIDTH							
TYPE 4			TYPE	2		7	TYPE 6			SEES	UBSECTION	500			DR	DRAWN: JAB				SCALE NONE
															A G	DATE: JULY 2021	21			SHEET 2 OF 3
															<u>i</u>	YANIIAC IAC				UNIVIDE 1 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -

EXHIBIT C-5 SHEET 3 OF 3 ROUND MOUNTAIN SOUTH T.S.

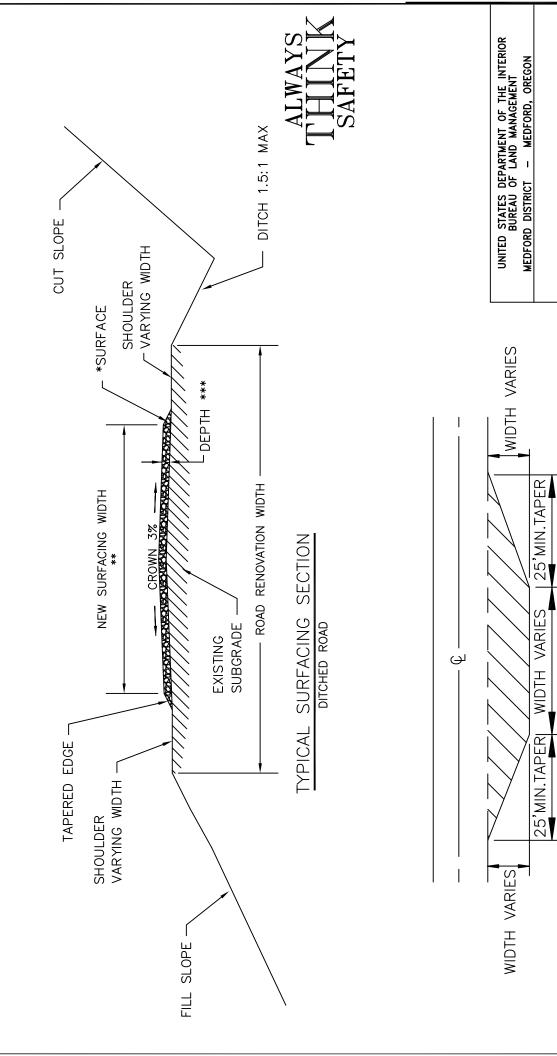
OR MILE OR SECTION MILE POST STATION TYPE 0.69 0.69 6 0.15 0.15 6 0.32 6 2.11 1.79 6	IONI MAXIMUM			GRADIEINI	7	9 -	/IDTH		!	SURFA	SURFACING (4)	[[
	DEGREE OF	SUBGRADE	ртсн БА	MAXIMUM MAXIMUM FAVORABLE ADVERSE	BEYO	-	EXISTING ROAD(S)	MINIMUM CO	BASE COURSE	BASE COURSE COMP. TYPE (2) GRADING	MINIM	SURFACE COURSE	COURSE TYPE (2) GRADING	REMARKS
		15	8		+			LI CIN	<u> </u>		<u> </u>	<u> </u>		
		15	в											
		15	3											
		15	3			9	9							Roadside Vegetation Maintenance
1.41 6		15	3			9	9				14'	4" D		Roadside Vegetation Maintenance
1.72 6		15	3											
1.78 6		16	3											
2.43 6		20	က											
9+50 3		14	0		10	2								New Temp Construction Outslope Right
12+67 12+67 3		14	0											Renovate
SURFACE WIDTH SURFACING 3 % SHOULDE	SURFACING SHOULDER SLOPE 1.5.:1	CUT SLOPE	CUT SLOPE 3 %— SUBGRADE WIDTH	FILL SLOPE	-4.500	EXTRA SUBGRAC ADD TO EACH FILL TILLS OF 1-6FT. & 6FT. WHOR THE CURVES AS FOLL WHEN THE DEGR 7-21 ADD 1FT. 22-35 ADD 1FT. 49-64 ADD 4FT. 65-96 ADD 8FT.	NOTES ANDE WIDTHS THE SHOULDER IF I. 8 JPT. FOR FILLS OF TO LLOWS: EGREE OF CURVE E T. T. T. T. T. T. T. T. T. T.	WOTES WOOD EACHFILE SIGNORANE WITH SIGNORANE WITH SIGNORANE WITH SIGNORANE WITH SIGNORANE WITH SIGNORANE WHEN THE NEED SHOLDER OF ALL SOFT AND FITHER SIGNORANE SHOLDER OF ALL SOFT AND FITH SIGNORANE SIGNOR						NITH I
TYPICAL SURFACING SECTION	,_	TYPICAL GRADING SECTION	RADING SI	ECTION	_ ~	MATERIALS COMMON		, PES	FILL SLOPES 1 1/2:1					SAFELL
TYPE 2		T	TYPE 3			SOFT ROCK & SHALE SOLID ROCK	SHALE 1,	1/2:1 11/2:1 AN	11/2:1 ANGLE OF REPOSE					
	.n.	CUT SLOPE MIN	MIN. BASE COURSE WIDTH	2. SHOULDER SLOPE 1.5:1			7YPE JCK MATERIAL ED ROCK MATE ROCK MATEF	EXCEEDING 60%. 2. Subtracing 1. Supervising 1. Sup			REV.NO. JNITED STAT REAU OF LAN	ES DEPAI ID MANAC	DESCRIPTION DATE SET SET SET SET SET SET SET SET SET S	METANO DESCRIPTION DATE APPROV. UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT
FI DITCH SUBGRADE WIDTH	FILL SLOPE		SUBGRADE WIDTH		FILL SLOPE 3.	D. CRUSHED F. E. BITUMINOU E. BITUMINOU F. NATURAL. A. WIDTH 10F1 SHOWN ON SHOWN ON	KOCK MATER IS SURFACE T T. IN ADDITION THE PLANS. PPROXIMATE!	CARCHAHD ROCK MATERIAL. E. BITUMINOUS SURFACE TREATMENT (BST). 3. TURNOUTS 4. WORTH THE PLANS. B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS. B. LOCATED APPROXIMATELY AS SHOWN ON THE ROAD PLANS.	IDTH,OR AS THE ROAD PLA	ģ				
CROWN SHALL BE 3% TYPICAL GRADING SECTION	TION CDITCH	TYPICAL	CROWN SHALL BE 3% CAL SURFACING S	WN SHALL BE 3% SURFACING SECTION	4	. SURFACING TURNOUTS, CURVE WIDENING AND ROAD APPROACH APRONS SHALL BE SURFACED	JRVE WIDENIN RONS SHALL E	JG AND ROAD 3E SURFACED.			N T		SPECIFICATION SHEET	_ _ _ _ _
TYPE 5			TYPE 6		ń	5. CLEAKING WIDTH SEE SUBSECTION 200	ON 200			DRAWN: JAB	JAB			SCALE NONE
										DATE: JULY 2021	LY 2021			SHEET 3 OF 3
										DRAWING NO.	G NO.			ORM05-TS-2021.0008-C5





NOTES

SURFACING WIDTH EDGES SHALL BE TAPERED TO SUBGRADE. TAPERS SHALL BE SMOOTH AND TRANSITION TO SUBGRADE AS TO NOT CAUSE A SUDDEN DROP OR STEEP EDGE.



TYPICAL TURNOUT SECTION

ORM05-TS-2021.0008-C8

DATE: JULY 2021 DRAWING NO.

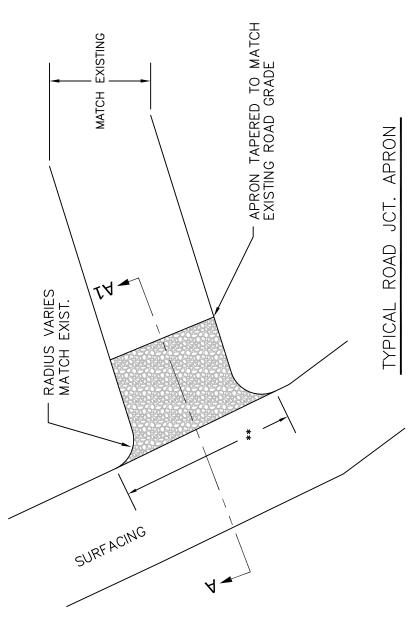
DRAWN: JAB

TYPICAL TURNOUT SECTION

SEE WORKLIST

SCALE: AS SHOWN SHEET 1 OF 1

EXHIBIT C-9 SHEET 1 OF 1



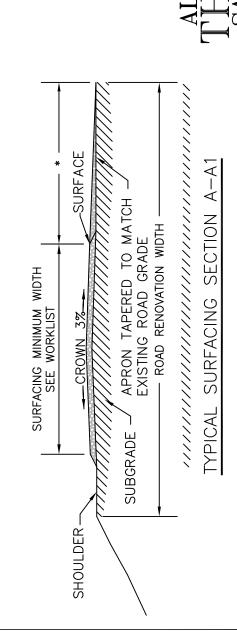
NOTES:

APRONS SHALL BE PLACED AT THE JUNCTIONS SPECIFIED IN THE WORK LIST.

TAPER DEPTH TO MATCH EXISTING ROAD GRADE.

*APRON LENGTHS VARY. EACH APRON SHALL BE CONSTUCTED WITH 10 CUBIC YARDS OF COMPACTED, IN-PLACE AGGREGATE.

**JUNCTION WIDTHS VARY; MATCH EXISTING.



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

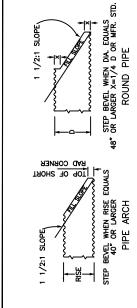
ROAD JUNCTION SURFACING APRON SECTION

DRAWN: JAB	SCALE: AS SHOWN
DATE: JULY 2021	SHEET 1 OF 1
DRAWING NO.	ORM05-TS-2021.0008-C9

EXHIBIT C-10 SHEET 1 OF 1 ROUND MOUNTAIN SOUTH T.S.

ROUND MOUNTAIN SOUTH T.S.				NOTES:	A. Designed culvert lengths and	locations are approximate.		B. Summary of quantities are shown on drawing Exhibit	C-4 (Estimate of	Quantities).		D. Downspouts shall be	connected to cuiver outlets via Turner Style connection.											ALWAYS	ANTH-II.	SAFEII		UNIED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT — MEDFORD, OREGON		CULVERT LIST	NDAWN, IAD CCAIF, AS CHOMA	ULY 2021	M05-TS-202
			REMARKS	Installation Type 3	Installation Type 1	Installation Type 3	Installation Type 3	Installation Type 1	Installation Type 1	Installation Type 3	Installation Type 3	Installation Type 3	Installation Type 1	Installation Type 3	Installation Type 3	Installation Type 3	Installation Type 3	Installation Type 1	Installation Type 1	Installation Type 3	Installation Type 3	Installation Type 3	Installation Type 1	Installation Type 2	Installation Type 3	Installation Type 3	TEMPORARY INSTALL	Installation Type 3	Installation Type 2	Installation Type 1	Installation Type 1	Installation Type 3	
	'DS	- 4	LES/NO NEEDED SBCASH	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	ON	YES	YES	ON.	YES	ON	YES	ON	YES	
		RECT. FLUME	ГЕИСТН																														
	DOWNSPOUTS		SIZE																					_									
		FULL ROUND	ГЕИСТН																					20,					10,				
	×	∄	SIZE																					18"					18,				
	짐	1/2 ROUND	ГЕИСТН																														
		1/2	SIZE																														
		⊢ .	ТЕИСТН																														
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	S		VANGE SKEM																														
	NO NO I		ГЕИСТН	34,	,09	30,	34,	70,	,09	36,	36,	38,	36,	36,	36,	36,	32,	40,	46,	38,	40,	36,	50,	36,	36,	36,	80,	32,	32,	50,	38,	36,	
	OCATI		CAGE	16	12	16	16	12	12	16	16	16	16	16	16	16	16	16	14	16	16	16	14	16	16	19	16	16	16	12	16	16	
	.		SIZE	18"	42"	18"	18"	48,	48,	18"	18"	18,	18,	18,	24"	24"	18,	24"	36"	18,	24"	18,	30"	18"	18"	18,	18"	18"	18,	42"	24"	24"	
	CULVERT	ESIGNED	STATION OR M.P.	0.15	0.42	0.21	0.38	0.62	0.17	0.53	60.0	0.22	0.07	0.19	0.29	0.43	0.59	0.73	1.32	0.10	0.20	1.44	1.72	3.00	0.11	0.30	0.08	0.21	0.60	2.91	2.99	3.08	
			ROAD NO.	33-3E-31.01		33-3E-32.00			34-2E-29.00 C	34-3E-05.00	34-3E-05.01		34-3E-07.00				34-3E-07.01			34-3E-07.04	34-3E-09.00 A				34-3E-09.02 B		34-3E-09.03 A	34-3E-09.00 A					

ROAD SUBGRADE INSTALL CULVERT 2' MIN FT. BELOW NORMAL DITCH LINE CATCH BASIN BACK SLOPES SHALL BE CONSTRUCTED TO THE SAME RATIO AS ADJOINING ROAD SECTION BACK SLOPE. CH BOTTOM SKEW CULVERT AS DIRECTED DITCH DAM DAM SKIKKKKKKKKKK CROSS SECTION AT CATCH BASIN DITCH DAM CULVERT KKKKKKKKKKKK .5, MIN--2, MIN-CULVERT ROAD SHOULDER. AT SUBGRADE PLAN VIEW ELEVATION DITCH DITCH

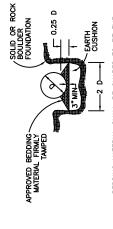


BEVELED END DETAIL

CULVERT INSTALLATION TYPES

RANDOM FIL

EXHIBIT C-11SHEET 1 OF 1 ROUND MOUNTAIN SOUTH T.S.



BEDDING MATERIAL SHALE BE SHAPED TO FIT THE BOTTOM OF THE CULVERT, EARTH CUSHIONING OF SILTY CLAY LOAM OF SAND MAY BE USED IF MATERIAL CAN BE PACED IN THE DRY CONDITION. IF THE EXCANATION IS WET, USE GRANULAR FOUNDATION FILL MATERIAL, MAIN-TIME, WIN, DEPTH BETWEEN HIGH POINTS OF ROCKS AND THE BOTTOM OF THE CULVERT.

BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT.

D+4" MIN-OR 2 D-

. Approved Bedding-Material Firmly Tamped

0.25 DT

BEDDING OF CULVERTS ON SOFT SPONGY OR UNSTABLE SOIL FOUNDATION

BEDDING OF CULVERTS ON STABLE NATURAL GROUND FOUNDATION OR COMPACTED EMBANKMENT

BEDDING MATERIAL SHALL BE SHAPED TO FIT THE BOTTOM OF THE CULVERT.

BEDDING OF CULVERT IN SOLID ROCK OR BOULDER FOUNDATION

DO NOT RAISE OUTLET ABOVE STREAM BED

NATURAL CHANNEL-

BEDDING OF CULVERTS

NOTES:

1) DOWNSPOUTS SHALL BE CONNECTED TO CULVERT OUTLETS VIA TURNER STYLE CONNECTION.



DOWN SPOUT WHERE REQUIRED

SEE CATCH BASIN —

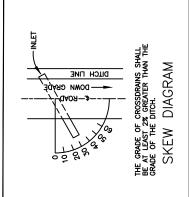
NATURAL GROUND

-NATURAL GROUND

CATCH BASIN

TYPE 3

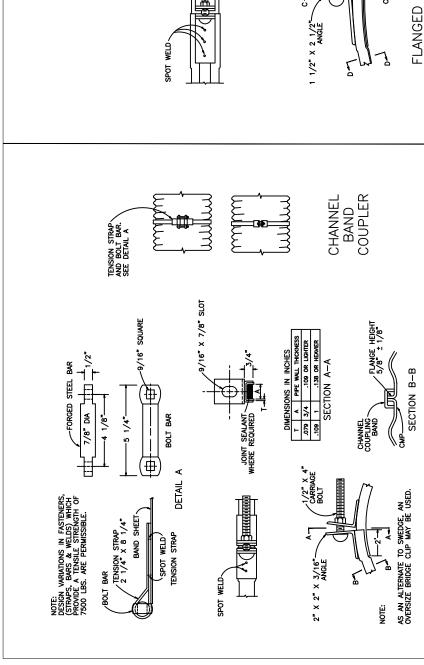
SEE CATCH BASIN —

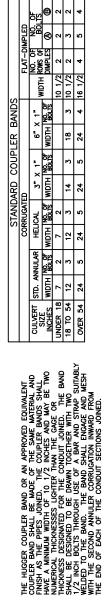


DOWN SPOUT WHERE REQUIRED

APPROV.	INTERIOR	OREGON	TION
DATE	OF THE	EDFORD,	1.1.1
REV. NO. DESCRIPTION DATE APPROV.	UNITED STATES DEPARTMENT OF THE INTERIOR	MEDFORD DISTRICT - ME	CITLVERT INSTALLATION

$\Gamma AILS$	SCALE NONE	SHEET 1 OF 1	ORM05-TS-2021.0008-C11
DETAI	DRAWN JAB	DATE JULY 2021	DRAWING NO. ORMO!





END COUPLER

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

Bands with anglesBands with tension type connections

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

STANDARD CONSTRUCTION IS 1 PIECE 12" THRU 48" AND 2 PIECE 54" AND ABOVE

CONTINUOUS — CORRUGATION AROUND BAND

2 2/3"-

ROLLED END PIPE

BAR AND STRAP CONNECTOR

10 1/2" MIN

"HUGGER" COUPLER BANDS

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD, OREGON	RTMENT OF THE AND MANAGEMEN — MEDFORD, "	HE INTERIOR MENT D, OREGON
CULVER DET	$\begin{array}{c} RT & E \\ TAIL \end{array}$	AND
DRAWN: JAB	SCALE	NONE
DATE JULY 2021	SHEET 1	OF 1

ORM05-TS-2021.0008-C12

DRAWING NO.

DATE APPROV

DESCRIPTION

REV. NO.

SHEET 1 OF 1 SURFACE COURSE AGGREGATE SEE ROAD RENOVATION WORKLIST FOR WATER DIPS TO BE ARMORED. THE WATER DIP INVERT SHALL BE SMOOTH AND FREE DRAINING. SHEET 1 OF CUT/FILL SLOPES minus) 4 INCH MINUS) DATE JULY 2021 NOTES (1-1/2"LEGEND SKEW DIAGRAM 7 σ— Down Grade 7 2 3 4 6 7 8 6 VARIABLE TO NATURAL GROUND CONSTRUCTION DETAIL ARMORED APRON DIMENSIONS ARMORED WATER DIP. 8" DEPTH, TAPER TO 6" EACH END. . 0 ROAD ____ SHOULDER Ω DRAWINGS NOT TO SCALE 30'(MIN) PP ORIGINAL GRADE LINE ROAD PROFILE ALONG D-E OF DRAIN DIP WATER 1)(NIN) - ARMORED APRON . 90 O SUBGRADE OUTSLOPE 3-5% ROAD PROFILE ALONG A-B-C OF DRAIN DIP TYPICAL ARMORED 30'(MIN) VERTICLE CURVE STATION OR MILEPOST LOCATION THE ŝ മ ORIGINAL GRADE LINE VERTICLE CURVE 30'(MIN) 16, NW .-器器

EXHIBIT C-13

- THE MINIMUM DIFFERENCE IN ELEVATION BETWEEN THE SAG AND THE CREST OF THE WATER DIP ALONG THE CUTSLOPE HINGE POINT IS 1.0 FEET.
- THE MINIMUM DIFFERENCE IN ELEVATION BETWEEN THE SAG AND THE CREST OF THE WATER DIP ALONG THE FILLSLOPE SHOULDER IS 1.5 FEET.
- SKEW DIP MINIMUM 15-30 DEGREES FROM PERPENDICULAR TO CENTERLINE.
- EXCAVATED SOIL SHALL BE UTILIZED IN CONSTRUCTION OF WATER DIP. SIDECASTING OF VEGETATIVE MATTER IS PERMITTED.
- 4" MINUS ROCK MATERIAL SHALL BE PLACED ON FILL SLOPE OF ARMORED WATERDIP.
- EACH DIP SHALL BE REINFORCED WITH 40 CUBIC YARDS OF 4" MINUS ROCK, ON ROADWAY AND 4" MINUS AT OUTFALL.
- WITH 20 CUBIC YARDS OF 1-1/2" MINUS ROCK, EXTENDING AND TAPERING IN DEPTH 20' ON EACH SIDE OF THE AWD, TO MEET THE EXISTING ROAD SURFACE. NATURAL SURFACE ROADS WILL ONLY USE THE 4" MINUS AGGREGATE. EACH DIP ON EXISTING ROCKED ROADS SHALL BE SURFACED

SUBGRADE ARMOR MATERIAL

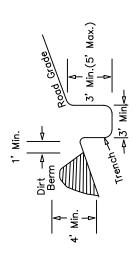
RUN FILL SLOPE ARMOR MATERIAL PIT OR OTHER APPROVED MATERIAL.

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

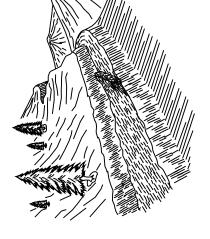
ARMORED	DIP CONSTRUCTION	SCALE NONE
TYPICAL	WATER DIP C	DRAWN BY JAB

ORM05-TS-2021.0008-C13 DRAWING NO.

EARTH/TRENCH BARRICADE



- BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.
 - THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD. ĸ
- THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.
- BETWEEN TO TOE OF THE DIRT BERM AND THE EDGE A MINIMUM OF 1' IS OF LEVEL GROUND IS NEEDED OF THE TRENCH.



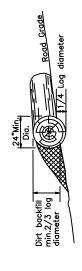
ROUND MOUNTAIN SOUTH T.S.

SHEET 1 OF 2

C - 14

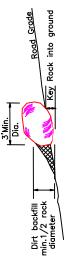
EXHIBIT

LOG BARRICADE



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

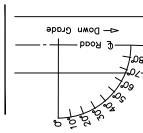
ROCK BARRICADE



- ROCK BARRICADE SHALL BE CONSTRUCTED AS SHOWN ABOVE. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.

 THE LENGTH SHALL BE SUFFICIENT TO BLOCK
- ROAD FROM VEHICLE USE
- THE MINIMUM DIAMETER OF ROCK SHALL BE 3 FEET. THE MAXIMUM SPACE BETWEEN ROCKS SHALL BE 36" OR AS APPROVED BY THE AUTHORIZED OFFICER.

SKEW DIAGRAM

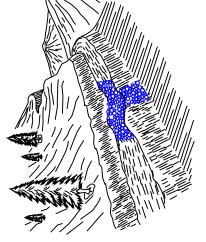


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	DAT	OF T ANAGE! EDFOR
	'. NO. DESCRIPTION DATE APPROV.	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT — MEDFORD, OREGON
	REV. NO.	UNITED ST. BU MEDFORD

DRAINAGE & EROSION CONTROL DETAILS

			l		l
DRAWN JAB	m	SCALE	_	NONE	
DATE JULY 2021	2021	SHEET	1	OF 2	
DRAWING NO.	ORMO	ORM05-TS-2021.0008-C14	21.0	-800	C14

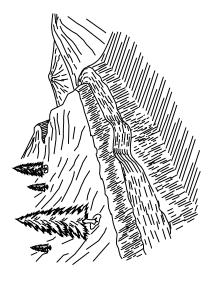
Z Level line , 5 WATER_BAR ಕ



ARMORED WATER DIP

1. SEE EXHIBIT C-13: ARMORED WATER DIP CONSTRUCTION DETAILS

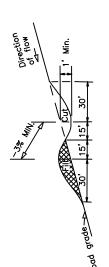




SHEET 2 OF 2 ROUND MOUNTAIN SOUTH T.S.

EXHIBIT C-14

WATER DIP



- WATER DIPS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
 EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
 ALL WATER DIPS SHALL BE SKEWED 30 DEGREES.
 THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE AND BE READILY CROSSED BY HIGH CLEARANCE TYPE VEHICLES.

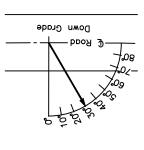
KEW DIAGRAM	
IAGI	SAM
√EW	PG
	ĆΕW

CROSS—DRAINS SHALL BE CONSTRUCTED AS SHOWN ABOVE. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.

ALL CROSS DRAINS SHALL BE SKEWED 30 DEGREES.

ъ. 4.

THE CROSS—DRAINS INVERT SHALL BE SMOOTH AND FREE DRAINING.



	DATE APPROV.	OF THE INTERIOR	AAGEMENT	JFORD, OREGON	EROSION	
	EV. NO. DESCRIPTION DATE APPROV.	UNITED STATES DEPARTMENT OF THE INTERIOR	BUREAU OF LAND MAI	'ORD DISTRICT - MEI	DRAINAGE & 1	
	REV.	UNITED		MEDF	DR	

DETAILS	SCALE NONE	SHEET 2 OF 2	OPM05_TS_2021 0008_C14
CONTROL	DRAWN JAB	DATE JULY 2021	PRAMING NO ONIMAGO

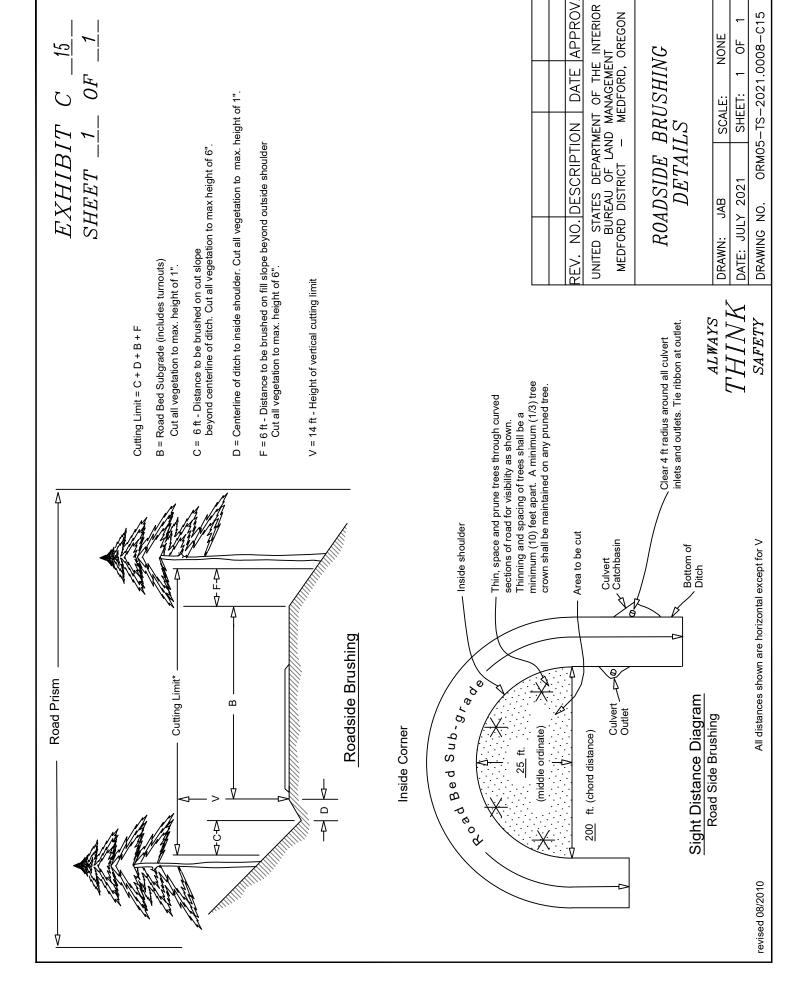


EXHIBIT C 16 SHEET 1 0F 1

B = Road Bed Subgrade (includes turnouts)

Cutting Limit = C + D + B + F

Cut all trees.

C = 6 ft - Distance to remove trees over 6" DBH on cut slope beyond centerline of ditch.

D = Centerline of ditch to inside shoulder.

F = 6 ft - Distance to remove trees over 6" DBH on fill slope beyond outside shoulder

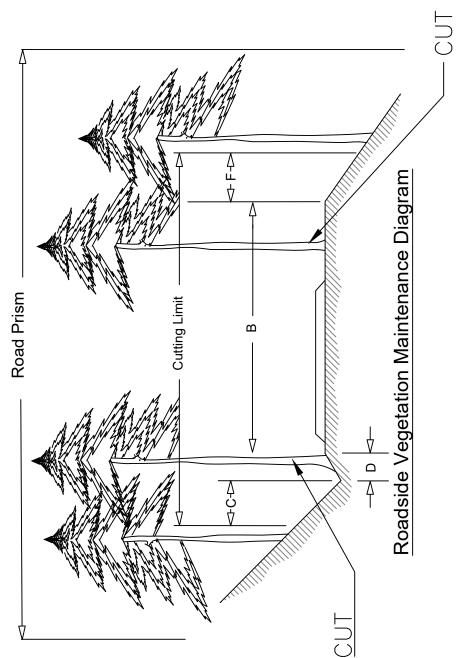
NOTES

Cut all non-merchantable and merchantable trees over 6" at DBH within the cutting limits.

All merchantable roadside cut trees outside of timber sale units will be marked with blue paint. All merchantable roadside trees within timber sales units shall be cut unless painted orange or pink (reserve trees).

All stumps that may impede road maintenance equipment from properly maintaining the road and ditch line shall be grubbed. Stump holes shall be filled (if needed) with suitable material and compacted.

See Exhibit C-3 (Maps) and Exhibit C-20: Road Renovation Worklist for Roadside Vegetation Maintenance locations.



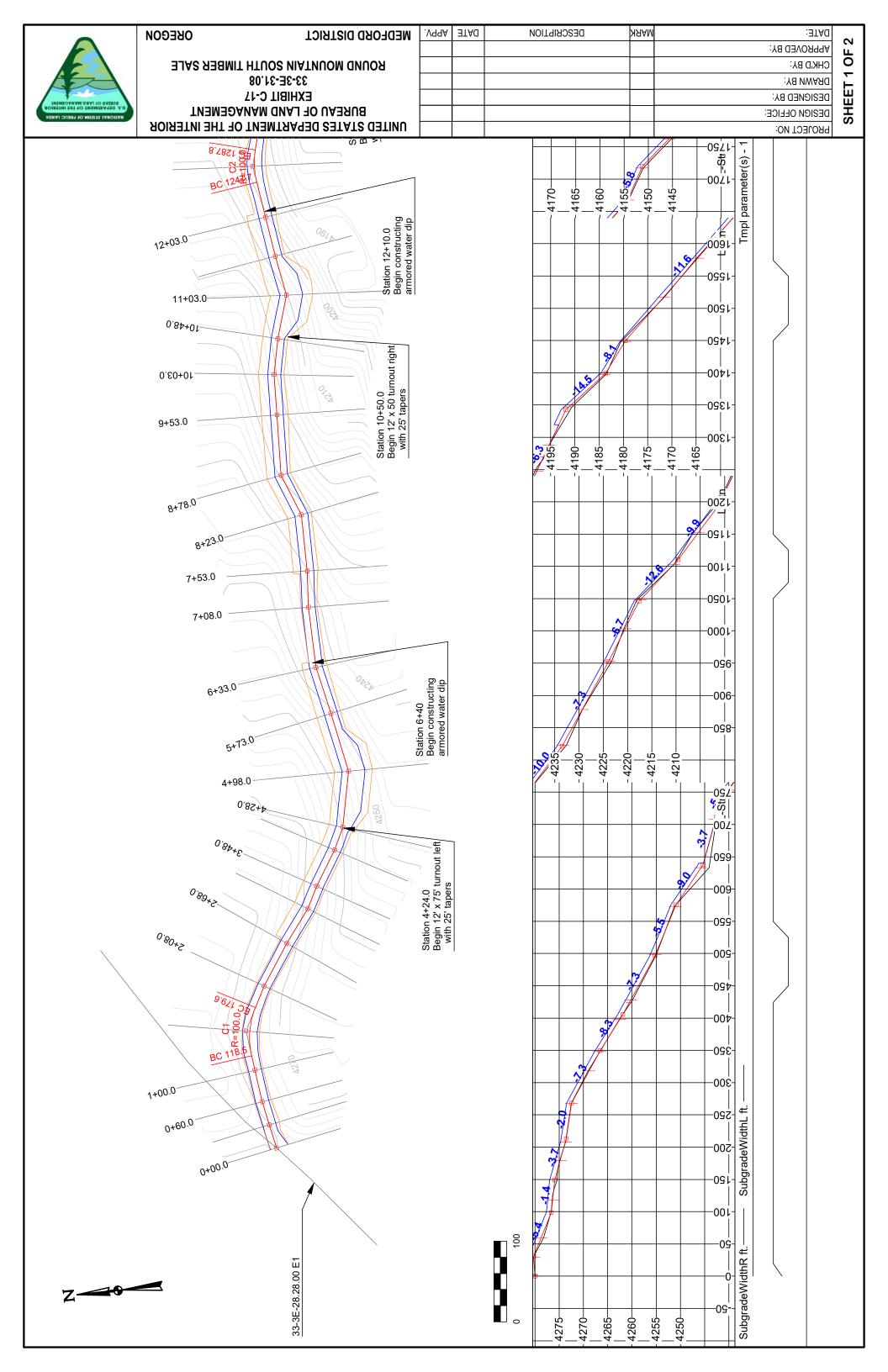
REV. NO. DESCRIPTION DATE APPROV UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT MEDFORD DISTRICT — MEDFORD, OREGON

ROADSIDE VEGETATION MAINTENANCE DETAILS

DRAWN: JAB	SCALE:	_	NONE	
DATE: JULY 2021	SHEET:	-	OF	-
DRAWING NO. ORMO5	ORM05-TS-2021.0008-C16	1.00	08-0	:16

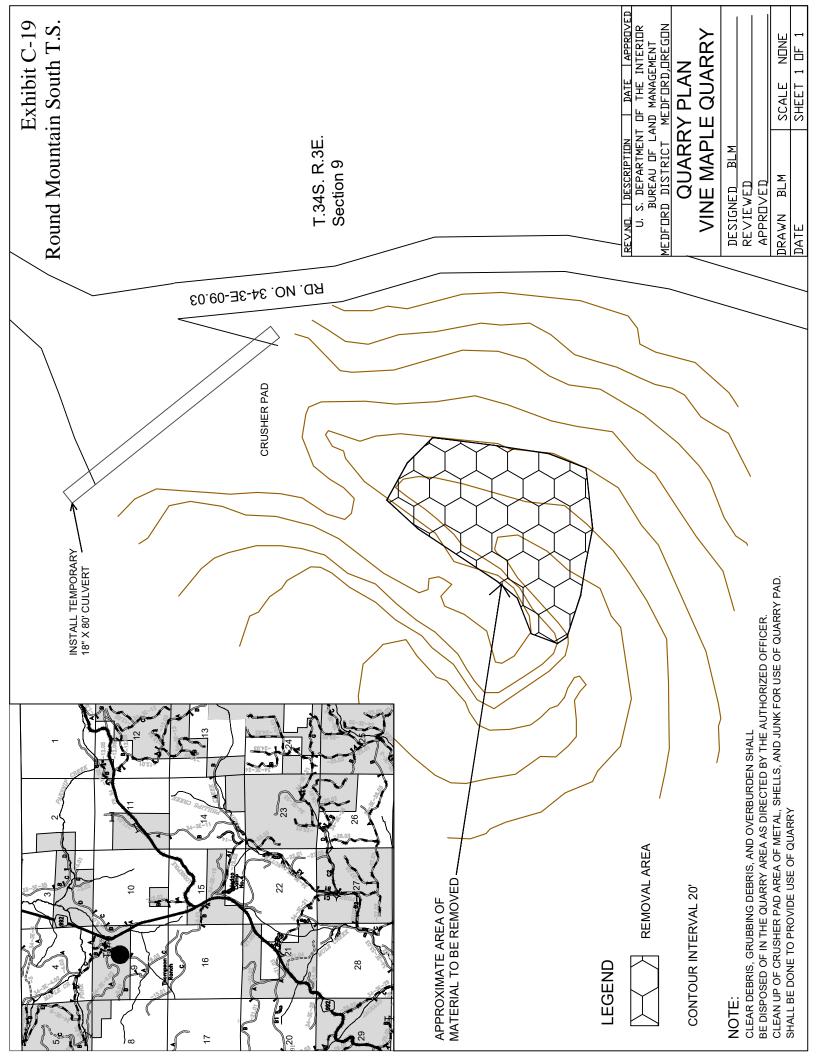
SAFETY

All distances shown are horizontal except for V



NAMES OF THE OWNER.	EXHIBIT C-17 33-3E-31.08 ROUND MOUNTAIN SOUTH TIMBER SALE MEDFORD DISTRICT OREGON	.V99А	DATE	DESIGN OFFICE: DATE: MARK DESCRIPTION DRAWN BY: DESIGNED BY: DESIGNED BY: DESIGNED BY: DESIGN OFFICE:
MAIJONAL SYSTEM OF FUBLIC LANDS LS. DEFAMINENT OF THE INTERIOR BUREN OF LAND MARKED CHREN	UNITED STATES DEPARTMENT OF THE INTERIOR THE INTERIOR THE INTERIOR THE INTERIOR			PROJECT NO:
Z	Sistion 14-50	Station 22+09 Begin 50' x 53' end landing with 25' tanger		1000 - 10

PROVED BY: MARK DESCRIPTION DATE APPV. MEDFORD DISTRICT OREGON	TAG —
ROUND MOUNTAIN SOUTH TIMBER SALE SOUTH TIMBER SALE	<u>Сн</u>
7MM В.X.: 33-3E-35'05 B EXHIBIT C-18	H DE
SIGN DEFICE: MATIONAL SYSTEM OF FUELCE LAND. MATIONAL SYSTEM OF FUELCE LAND.	S DE
SIGNED BY: BUREAU OF LEAD MANAGEMENT BUREAU OF LEAD MANAGEMENT BUREAU OF LEAD MANAGEMENT BUREAU OF THE INTERIOR BUREAU OF LEAD MANAGEMENT	SHEE.



Road Renovation Work List

Renovation/Improvement/Construction: This consists of road work to be performed on the road prior to its use. This work includes, but not limited to; clearing and grubbing, excavation for roads and landings, compacting, watering, blading and/or rolling the road surface, cleaning/constructing ditches where needed, cleaning or enlarging catch basins and outlets, replacing/installing new culverts, cleaning the entire barrel of all culverts, maintaining water dips (WDs), maintaining/constructing armored water dips (AWDs), spot rocking, road surfacing, seeding and mulching, constructing water bars, and constructing barricades. Remove all down trees from road surface, ditch lines, culvert catch basins, and within brushing limits. All culvert replacements shall be capped with 20 cubic yards (unless otherwise noted in the worklist) from Exhibit C-21, Section 1200 (Gradation C-1) or from government furnished 34" minus crushed aggregate from stockpiles located on Exhibit C-2 maps. Armored water dips constructed on existing rocked roads shall be constructed using 40 cubic yards of 4" minus as a base course that meets screened rock specifications in Exhibit C-21, Section 900 and capped with 20 cubic yards of 1½" minus crushed aggregate from commercial sources that meet crushed aggregate specifications in Exhibit C-21, Section 1200. Armored water dips constructed on natural surface roads shall be constructed with 40 cubic yards of 4" minus that meet screened rock specifications in Exhibit C-21, Section 900. All aggregate conforming to Exhibit C-21, Section 900 (Gradation A) and 1200 (Gradation C-1) shall be from commercial quarries. All turnout and truck turnaround widths are in addition to 16' subgrade widths.

Roadside Brushing: This consists of road work to be performed on the road prior to its use. The work includes, but is not limited to: brushing 6 horizontal feet from the centerline of the ditch and 6 horizontal feet from the outside shoulder of the road prism, removing brush within 4' of the inlet and outlet of CMPs, removing brush, limbs, and trees along the roadway to improve sight distance. Disposal from roadside brushing shall be lop and scatter or by chipping. Debris shall not be allowed to accumulate in concentrations but shall be further reduced or removed. Concentrations will be defined as any debris, limbs or branches touching each other or piled on top of each other or any material sticking up over 2 feet in elevation above the ground. Cut trees or debris shall not be allowed to stand or lean against other standing uncut trees or brush. Such "hang ups" shall be removed and scattered down slope. Debris shall be cut so that the length of limbs, downed pole, hardwoods, or brush does not exceed eight feet. Brush shall be cut to meet regular specifications in Section 2100. While roadside brushing, there shall be no scarring or any other damage of the tree trunk or bole allowed. Use of excavators for brush removal will be at the discretion of the Authorized Officer.

Roadside Vegetation Maintenance: This work includes removing merchantable and non-merchantable trees 6 horizontal feet from the centerline of the ditch and 6 horizontal feet from the outside shoulder of the road prism as designated in the work list and on Exhibit C-3 (Roadside Vegetation Management Maps). Vegetation to be cut and disposed of will be from 6 inches diameter at breast height and up. All roadside vegetation maintenance sections shall be posted, flagged, and staked with beginning and ending mileposts. Merchantable trees in sections outside of timber sale units are marked with blue paint. All merchantable roadside trees within timber sale units shall be cut unless painted orange or pink (reserve trees). All stumps that may

hinder road maintenance operations including road blading operations and snow plowing shall be removed. Any damage that occurs to the road shall be repaired and re-compacted. Any loose soil that remains on site shall be re-compacted or disposed of at areas designated by the Authorized Officer. All disturbed areas shall be seeded and mulched. All remaining brush and limbs from tree removal operations shall be either chipped or piled in locations designated by the Authorized Officer below the road in accordance with clearing and grubbing methods and/or roadside brushing disposal methods in Exhibit C-21 (Round Mountain South Road Specifications, Sections 200 and 2100).

Jct. – JunctionCY – Cubic YardsAWD – Armored Water DipWD – Water Dip

CMP – Corrugated Metal Pipe ASC – Aggregate Surface Course PRR – Pit Run Rock BST – Bituminous Surface Treatment

NAT – Natural Surface Roads PVT - Private

Road 33-3E-28.00 (Divide Road – Round Mountain End) Segment E1 (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.00. Begin road renovation, roadside brushing, and roadside vegetation maintenance.
- 0.13 Jct. w/ 33-3E-31.05 left (barricaded).
- 0.20 Construct 33-3E-31.08 right.
- 0.23 Jct. w/ un-numbered road left. BLM stockpile left approximately 150CY.
- 0.27 Jct. w/ un-numbered roads left and jct. w/ Temp 32-1 right. BLM stockpile left approximately 150CY.
- 0.51 End roadside vegetation maintenance.
- 0.70 Jct. w/ 33-3E-31.00 left. End road renovation and roadside brushing.

<u>Road 33-3E-28.00</u> (Divide Road – Round Mountain End) Segment E2 (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.00. Begin road renovation, roadside brushing, and roadside vegetation maintenance.
- 0.04 Jct. w/ 33-3E-31.02 right (barricaded). Potential truck turnaround.
- 0.29 Jct. w/ 33-3E-31.03 right (barricaded). Potential truck turnaround.
- 0.41 End roadside vegetation maintenance.
- 0.45 Begin roadside vegetation maintenance.
- 0.55 Jct. w/ 33-3E-31.07 left.
- 0.65 Property line (into private). End segment E2. End roadside vegetation maintenance.

Segment F (Private) PRR

- 0.68 Jct. w/ 33-3E-31.04 right.
- 1.03 Jct. w/ private road right.
- 1.55 Jct. w/ 34-2E-29.00 straight. End segment F. End road renovation and roadside brushing.

Road 33-3E-31.01 (S Fork Vine Maple Creek) (BLM) PRR

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.00. Begin road renovation and roadside brushing and chipping. Reestablish entire ditch line.
- 0.10 Begin roadside vegetation maintenance.
- 0.15 Replace existing 18" cross drain culvert with an 18" x 34' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.31 End roadside vegetation maintenance.
- 0.33 Remove existing cross drain culvert. Construct AWD. (See Exhibit C-13; Armored Water Dip Construction sheet for details).
- 0.42 Replace existing 30" draw culvert with a 42" x 60' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type). Cap culvert replacement with 50CY of surface course aggregate conforming to section 1200 (Gradation C-1) or from existing BLM stockpiles located on Exhibit C-2 maps.
- 0.57 End road renovation and roadside brushing and chipping.

<u>Road 33-3E-31.02</u> (<u>Bourbon</u>) (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 33-3E-28.00. Begin road renovation, roadside brushing and chipping, and roadside vegetation maintenance. Re-establish water bars after use.
- 0.02 Remove earth barricade. Re-establish after use.
- 0.37 End road renovation, roadside brushing and chipping, and roadside vegetation maintenance.

<u>Road 33-3E-31.03 (Bourbon)</u> (<u>BLM) ASC</u>

M.P. Remarks

- 0.00 Jct. w/ 33-3E-28.00. Begin road improvement, roadside brushing and chipping, and roadside vegetation maintenance. Re-establish entire ditch line. Completely clean out culvert barrels and catch basins.
- 0.03 Remove earth barricade. Re-establish after use.
- 0.60 End road improvement and roadside brushing, chipping, and roadside vegetation maintenance.

Road 33-3E-31.05 (BLM) NAT

- 0.00 Jct. w/ 33-3E-28.00. Begin road improvement, roadside brushing and chipping, and roadside vegetation maintenance.
- 0.02 Remove earth barricade. For road winterization, construct barricade, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15th of the same year

it is improved.

- 0.40 Construct Temp 31-5 right.
- 0.56 End road improvement, roadside brushing and chipping, and roadside vegetation maintenance.

Road 33-3E-31.07 (S Fork Vine Maple Cr Sp) Segment A (Private) ASC

M.P. Remarks

- 0.00 Jct. w/ 33-3E-28.00. Begin road renovation and roadside brushing.
- 0.13 End road renovation and roadside brushing.

Road 33-3E-31.08 (Vine Maple Creek Overlook) (BLM) ASC

Sta Remarks

- 0+00 Jct. w/ 33-3E-28.00. Begin new construction. See Exhibit C-17 for plan, profile, and specifications. Begin surfacing 15' wide with an 8" compacted depth using gradation A from Table 903 in Exhibit C-21. Place surface course surfacing 14' wide with a 4" compacted depth using gradation C-1 from Table 1204 in Exhibit C-21 on top of 4" minus base.
- 4+24 Construct 75' x 12' turnout right with 25' tapers.
- 6+40 Begin constructing AWD. (See Exhibit C-13; Armored Water Dip Construction sheet for details).
- 10+50 Construct 50' x 12' turnout right with 25' tapers.
- 12+10 Begin constructing AWD. (See Exhibit C-13; Armored Water Dip Construction sheet for details).
- 14+50 Construct 75' x 12' turnout right with 25' tapers.
- 19+49 Construct 30' x 40' truck turn around right with 20' tapers.
- 22+09 Construct 53' x 50' landing with 25' tapers coming into landing.
- 22+87 End new construction.

Road 33-3E-32.00 (S Fork Vine Maple Creek) (BLM) PRR

- 0.00 Jct. w/ 34-3E-09.00. Begin road renovation and roadside brushing and chipping.
- 0.21 Replace existing 18" cross drain culvert with an 18" x 30' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.38 Replace existing 18" cross drain culvert with an 18" x 34' CMP with a splash pad. Culvert installation shall be a Type 3 with new culvert outlet 1' lower than existing culvert outlet (refer to Culvert Installation Details Sheet for installation type).
- 0.41 Begin roadside vegetation maintenance.
- 0.42 Jct. w/ un-numbered road left.
- 0.51 End roadside vegetation maintenance.
- 0.62 Replace existing 24" draw culvert with a 48" x 70' CMP with a splash pad. Culvert installation shall be a Type 1 with new culvert outlet 3' lower than existing culvert outlet

(refer to Culvert Installation Details Sheet for installation type). Cap culvert replacement with 50CY of surface course aggregate conforming to section 1200 (Gradation C-1) or from existing BLM stockpiles located on Exhibit C-2 maps.

0.70 End road renovation and roadside brushing and chipping.

Road 33-3E-32.01 (Private) PRR

M.P. Remarks

- 0.00 Jct. w/ 34-3E-05.05. Begin road renovation and roadside brushing.
- 0.61 Jct. w/ 33-3E-32.02 left. End road renovation and roadside brushing.

Road 33-3E-32.02

Segment A1 (BLM) PRR

M.P. Remarks

- 0.00 Jct. w/ 33-3E-32.01. Begin road renovation and roadside brushing.
- 0.01 Remove stump barricade. For road winterization, construct earth barricade prior to October 15th of the same year it is removed.
- 0.07 Property line (into BLM). End segment A1.

Segment A2 (BLM) NAT

MP Remarks

- 0.07 For road winterization, construct water bars every 100' and seed and mulch all disturbed areas prior to October 15th of the same year it is constructed.
- 0.18 End renovation. Begin road improvement. Begin widening road to 16' outsloped left. For road winterization, construct barricade, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15th of the same year it is improved.
- 0.28 End segment A2. End road improvement and roadside brushing. End widening.

Segment B (BLM) NAT

MP Remarks

- 0.28/0+00 Begin new construction by outsloping left. See Exhibit C-18 for plan, profile, and specifications. Construct water bars every 100', and seed and mulch all disturbed areas prior to October 15th of the same year it is constructed.
- 2+25 Construct 50' x 17' turnout left with 25' tapers.
- 6+60 Construct 50' x 50' landing with 25' tapers coming into landing.
- 7+37 End new construction.

Road 34-2E-29.00 (Divide Road – Box Creek End) Segment C (BLM) ASC

- 0.00 Jct. w/ 33-3E-28.00. Begin road renovation, roadside brushing, and roadside vegetation maintenance. Scarify potholes.
- 0.07 Jct. w/ 34-3E-06.02 right.
- 0.15 End roadside vegetation maintenance.
- 0.17 Replace existing 24" draw culvert with a 48" x 60' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type). Cap culvert replacement with 50CY of surface course aggregate conforming

to section 1200 (Gradation C-1) or from existing BLM stockpiles located on Exhibit C-2 maps.

- 0.20 Begin roadside vegetation maintenance.
- 0.54 Jct. w/ 34-3E-07.00 left. End road renovation, roadside brushing, and roadside vegetation maintenance.

Road 34-3E-01.00 (Cur Creek Spur) Segment B (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-12.00. Begin road renovation and roadside brushing.
- 0.02 End road renovation and roadside brushing.

Road 34-3E-03.00 (North Fork Vine Maple Creek) Segment B (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.00. Begin road renovation and roadside brushing.
- 0.02 End road renovation and roadside brushing.

Road 34-3E-05.00 (Vine Maple Spur) (BLM) PRR

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.02. Begin road renovation, roadside brushing, and roadside vegetation maintenance. Begin surfacing 14' wide with a 4" compacted depth using gradation C-1 from Table 1204 in Exhibit C-21. Surface one turnout approximately 50' in length and 10' in width.
- 0.39 End roadside vegetation maintenance.
- 0.53 Replace existing 18" cross drain culvert with an 18" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.55 Jct. w/34-3E-18.00. End road renovation, surfacing, and roadside brushing.

Road 34-3E-05.01 (Vine Maple Spur) (BLM) ASC

- 0.00 Jct. w/ 34-3E-09.00. Begin road renovation and roadside brushing. Begin surfacing 14' wide with a 4" compacted depth using gradation C-1 from Table 1204 in Exhibit C-21. Surface two turnouts approximately 50' in length and 10' in width.
- 0.09 Replace existing 18" cross drain culvert with an 18" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.22 Replace existing 18" cross drain culvert with an 18" x 38' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.29 Dig out outlet ditch for 30' to drain water away from culvert outlet.
- 0.31 Jct. w/ 34-3E-09.02 left and right. End road renovation, surfacing, and roadside

brushing.

Road 34-3E-05.02 (Vine Maple Spur) (BLM) NAT

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.02. Begin road renovation, roadside brushing and chipping, and roadside vegetation maintenance.
- 0.01 Remove earth barricade. For road winterization, construct barricade, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15th of the same year it is renovated.
- 0.08 Construct AWD. (See Exhibit C-13; Armored Water Dip Construction sheet for details).
- 0.21 Construct AWD. (See Exhibit C-13; Armored Water Dip Construction sheet for details).
- 0.32 End road renovation, roadside brushing and chipping, and roadside vegetation maintenance.

Road 34-3E-05.04 (Vine Maple Spur) (BLM) NAT

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.02. Begin road renovation, roadside brushing and chipping, and roadside vegetation maintenance.
- 0.02 For road winterization, construct barricade, construct water bars every 100', and seed and mulch all disturbed areas prior to October 15th of the same year it is renovated.
- 0.66 End road renovation, roadside brushing and chipping, and roadside vegetation maintenance.

Road 34-3E-05.05 (Vine Maple Spur) (Private) PRR

M.P. Remarks

- 0.00 Jct. w/ 34-3E-03.00. Begin road renovation and roadside brushing.
- 0.07 Jct. w/ 33-3E-32.01 left. End road renovation and roadside brushing.

Road 34-3E-07.00 (7 Up)

(BLM) ASC

- 0.00 Jct. w/ 34-3E-18.00. Begin road renovation, roadside brushing, and roadside vegetation maintenance.
- 0.07 Replace existing 18" cross drain culvert with an 18" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.17 End roadside vegetation maintenance.
- 0.19 Replace existing 18" cross drain culvert with an 18" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.29 Replace existing 18" cross drain culvert with a 24" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation

- type).
- 0.35 Begin roadside vegetation maintenance.
- 0.43 Replace existing 18" cross drain culvert with a 24" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.54 Jct. w/ 34-3E-07.02 right.
- 0.73 Jct. w/ 34-2E-29.00 left and right. End road renovation, roadside brushing, and roadside vegetation maintenance.

<u>Road 34-3E-07.01 (7 Up)</u> (<u>BLM)</u> <u>ASC</u>

M.P. Remarks

- 0.00 Jct. w/ 34-3E-18.00. Begin road renovation, roadside brushing, and roadside vegetation maintenance.
- 0.59 Replace existing 18" cross drain culvert with a 18" x 32' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.70 Jct. w/ 34-3E-07.02 left. Begin chipping.
- 0.71 Remove vandalized guardrail gate and posts. End roadside vegetation maintenance.
- 0.73 Replace existing 18" cross drain culvert with a 24" x 40' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type).
- 0.75 Begin roadside vegetation maintenance.
- 0.96 Remove 500CY slide across road. Haul to waste disposal site on lower end of the lower bench of the quarry at milepost 0.37 on road number 34-3E-07.04. Place 100Cy of BLM stockpile aggregate back on road after slide is removed.
- 1.15 Remove existing cross drain culvert. Construct AWD. (See Exhibit C-13; Armored Water Dip Construction sheet for details).
- 1.22 Remove existing cross drain culvert. Construct AWD. (See Exhibit C-13; Armored Water Dip Construction sheet for details).
- 1.30 End roadside vegetation maintenance.
- 1.32 Replace existing 24" draw culvert with a 36" x 46' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type).
- 1.40 End road renovation and roadside brushing and chipping.

<u>Road 34-3E-07.02 (7 Up)</u> (<u>BLM) ASC</u>

M.P. Remarks

- 0.00 Jct. w/ 34-3E-07.01. Begin road renovation, roadside brushing, and roadside vegetation maintenance.
- 0.68 Jct. w/ 34-3E-07.00 left and right. End road renovation, roadside brushing, and roadside vegetation maintenance.

Road 34-3E-07.03 (7 Up)

(BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-18.00. Begin road renovation, roadside brushing and chipping, and roadside vegetation maintenance. Replace all water bars after use. Begin surfacing 14' wide with a 6" compacted depth using gradation C-1 from Table 1204 in Exhibit C-21. Surface two turnouts approximately 50' in length and 10' in width.
- 0.02 Remove earth barricade.
- 0.04 Jct. w/ 34-3E-07.03 right (loop road).
- 0.43 Jct. w/ 34-3E-07.03 left and right. End road renovation, surfacing, roadside brushing and chipping, and roadside vegetation maintenance.

Road 34-3E-07.04 (7 Up) (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-18.00. Begin road renovation and roadside brushing and chipping.
- 0.03 Existing pipe gate.
- 0.04 Begin roadside vegetation maintenance.
- 0.10 Replace existing 18" cross drain culvert with an 18" x 38' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.37 Existing BLM quarry access road right. Renovate and brush and chip access road to bottom of quarry (approximately 0.09 miles). Waste disposal site at far end of lower bench down quarry access road. Seed and mulch waste.
- 0.38 Existing BLM stockpile right (approximately 150CY).
- 0.40 End road renovation, roadside brushing and chipping, and roadside vegetation maintenance.

Road 34-3E-09.00 (Vine Maple Mainline) Segment A (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ Bute Falls Prospect Highway. Begin road renovation, roadside brushing, and roadside vegetation maintenance.
- 0.20 Replace existing 18" cross drain culvert with a 24" x 40' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.43 Jct. w/ 34-3E-09.02 and 34-3E-09.03 left. End segment A.

Segment B (BLM) ASC

MP Remarks

0.64 Property line (into private). End segment B. End roadside vegetation maintenance.

Segment C (Private) ASC

MP Remarks

1.02 Jct. w/ 34-3E-04.03 right. End segment C.

Segment D (Private) ASC

MP Remarks

1.36 Property line (into BLM). End segment D.

Segment E (BLM) ASC

MP Remarks

- 1.44 Replace existing 18" cross drain culvert with an 18" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 1.61 Jct. w/ 34-3E-05.01 left.
- 1.62 Begin roadside vegetation maintenance.
- 1.69 End roadside vegetation maintenance.
- 1.72 Replace existing 18" draw culvert with a 30" x 50' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type).
- 1.74 Begin roadside vegetation maintenance.
- 2.58 End roadside vegetation maintenance.
- 2.80 Jct. w/ 34-3E-03.00 right. End segment E.

Segment F (BLM) ASC

MP Remarks

- 3.00 Replace existing 18" draw culvert with an 18" x 36' CMP with a 20' full round downspout. Culvert installation shall be a Type 2 (refer to Culvert Installation Details Sheet for installation type).
- 3.17 Jct. w/ 33-3E-32.00 left.
- 3.21 Dig out outlet ditch for 20' to drain water away from culvert outlet.
- 3.46 Dig out outlet ditch for 20' to drain water away from culvert outlet.
- 3.69 Jct. w/ 33-3E-31.01 left.
- 3.76 Begin roadside vegetation maintenance.
- 3.77 Dig out outlet ditch for 10' to drain water away from culvert outlet.
- 4.00 Jct. w/ 33-3E-28.00 left and right. End road renovation, roadside brushing, and roadside vegetation maintenance.

Road 34-3E-09.02 (Vine Maple Lower Road) Segment A (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.00. Begin road renovation and roadside brushing.
- 0.02 Jct. w/ 34-3E-09.03 left. End road renovation and roadside brushing.

Road 34-3E-09.02 (Vine Maple Lower Road) **Segment B** (BLM) ASC

- 0.00 Jct. w/ 34-3E-05.01. Begin road renovation and roadside brushing. Begin surfacing 14' wide with a 4" compacted depth using gradation C-1 from Table 1204 in Exhibit C-21. Surface two turnouts approximately 50' in length and 10' in width.
- 0.02 Begin roadside vegetation maintenance.
- 0.11 Replace existing 18" cross drain culvert with an 18" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.30 Replace existing 18" cross drain culvert with an 18" x 36' CMP with a splash pad.

Culvert installation shall be a Type 2 (refer to Culvert Installation Details Sheet for installation type).

0.35 Jct. w/ 34-3E-05.00 left. End surfacing.

Segment C (BLM) NAT

MP Remarks

- 0.60 Begin chipping.
- 0.80 Jct. w/ 34-3E-05.04 left and jct. w/ 34-3E-05.02 straight. End road renovation, roadside brushing and chipping, and roadside vegetation maintenance.

Road 34-3E-09.03 (Vine Maple Quarry Road)

Segment A (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-09.03. Begin road renovation and roadside brushing.
- 0.08 **Vine Maple Quarry.** Install temporary 18" x 80' CMP in existing trench to allow access into quarry area. End road renovation and roadside brushing.

Road 34-3E-12.00 (Cur Creek RR Run Road)

Segment A (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/FS 34 (Lodgepole Road). Begin road renovation and roadside brushing.
- 0.13 End segment A.

Segment B (Private) ASC

MP Remarks

- 0.13 Place 20 CY of ASC on segment B where needed in lieu of paying rockwear fees per license agreement.
- 0.30 Jct. w/ 34-3E-12.01 right.
- 0.56 Property line (into BLM). End segment B.

Segment C (BLM) ASC

MP Remarks

- 0.75 Jct. w/ 34-3E-01.00 left.
- 1.06 Jct. w/ 34-3E-12.02 left.
- 1.67 End road renovation and roadside brushing.

Road 34-3E-12.01 (Cedar Springs Road)

Segment A (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-12.00. Begin road renovation and roadside brushing.
- 0.08 Property line (into BLM).
- 0.14 Property line (into Private).
- 0.24 Property line (into BLM).
- 0.35 Property line (into Private).
- 0.50 Property line (into BLM).
- 0.65 Jct. w/ 34-3E-12.03 left. End segment A.

Segment B (BLM) ASC

- 0.65 Begin chipping.
- 1.25 End road renovation and roadside brushing and chipping.

Road 34-3E-12.03 (Sitter Elk Reserve Road) Segment A (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-12.01. Begin road renovation and roadside brushing and chipping.
- 0.09 Jct. w/ 34-3E-12.04 left.
- 0.69 Jct. w/ 34-3E-13.05 left. End road renovation and roadside brushing and chipping.

Road 34-3E-13.00 (Pump Chance Pike) (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-12.01. Begin road renovation and roadside brushing and chipping.
- 0.15 Pump chance left. Brush and chip around pump chance access road. End road renovation and roadside brushing and chipping.

Road 34-3E-18.00 (Seven Up) Segment A (Private) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-12.01. Begin road renovation and roadside brushing.
- 0.16 End segment A.

Segment B (BLM) ASC

MP Remarks

- 0.21 Replace existing 18" cross drain culvert with an 18" x 32' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 0.32 Property line (into BLM). End segment B.

Segment C (BLM) ASC

- 0.40 Pump chance access road right. Renovate and brush access road (approximately 0.05 miles).
- 0.60 Replace existing 18" cross drain culvert with an 18" x 32' CMP with a 10' full round downspout. Culvert installation shall be a Type 2 (refer to Culvert Installation Details Sheet for installation type).
- 0.62 Pump chance access road right. Renovate and brush access road until it meets back up with the 34-3E-18.00 road again (approximately 0.06 miles).
- 0.70 Pump chance access road right.
- 0.78 Begin roadside vegetation maintenance.
- 0.89 Jct. w/ 34-3E-07.00 left.
- 1.07 End roadside vegetation maintenance.
- 1.17 Begin roadside vegetation maintenance.
- 1.47 Jct. w/ 34-3E-07.01 left.
- 1.54 Property line (into Private). End roadside vegetation maintenance.
- 1.81 Property line (into BLM). Jct. w/ private road right. Begin roadside vegetation

- maintenance.
- 2.02 End roadside vegetation maintenance.
- 2.07 Begin roadside vegetation maintenance.
- 2.11 Jct. w/ 34-3E-07.03 right (barricaded). Begin surfacing 14' wide with a 4" compacted depth using gradation C-1 from Table 1204 in Exhibit C-21. Surface six turnouts approximately 50' in length and 10' in width.
- 2.22 End roadside vegetation maintenance.
- 2.27 Jct. w/ 34-3E-07.04 left (gated).
- 2.29 Begin roadside vegetation maintenance.
- 2.62 End roadside vegetation maintenance.
- 2.65 Begin roadside vegetation maintenance.
- 2.90 End roadside vegetation maintenance.
- 2.91 Replace existing 24" draw culvert with a 42" x 50' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type). Cap culvert replacement with 50CY of surface course aggregate conforming to section 1200 (Gradation C-1) or from existing BLM stockpiles located on Exhibit C-2 maps.
- 2.93 Begin roadside vegetation maintenance.
- 2.97 End roadside vegetation maintenance.
- 2.99 Replace existing 18" draw culvert with a 24" x 38' CMP with a splash pad. Culvert installation shall be a Type 1 (refer to Culvert Installation Details Sheet for installation type).
- 3.01 Begin roadside vegetation maintenance.
- 3.08 Replace existing 18" cross drain culvert with a 24" x 36' CMP with a splash pad. Culvert installation shall be a Type 3 (refer to Culvert Installation Details Sheet for installation type).
- 3.25 End roadside vegetation maintenance.
- 3.52 Jct. w/ 34-3E-05.00 right and left. End road renovation, surfacing, and roadside brushing.

Road 34-3E-19.03 (Seven Up Road) Segment A (Private) ASC

M.P. Remarks

- 0.00 Jct. w/ 34-3E-29.01. Begin road renovation and roadside brushing.
- 0.18 Access road to BLM quarry right. Existing BLM stockpile, approximately 750 CY.
- 0.25 Property line (into Private).
- 0.50 Property line (into BLM).
- 0.72 Property line (into Private).
- 0.79 End segment A.

Segment B (Private) ASC

MP Remarks

- 0.92 Jct. w/ 34-3E-21.01 right and private road left.
- 1.72 Jct. w/ 34-3E-18.00 right. End road renovation and roadside brushing.

Road 34-3E-29.01 (Section 19 Select Mainline)

Segment A (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ Bute Falls Prospect Highway. Begin road renovation and roadside brushing.
- 0.54 Jct. w/ 34-3E-21.03 right.
- 0.63 Property line (into Private). End segment A.

Segment B (Private) ASC

MP Remarks

- 0.79 Jct. w/ 34-3E-30.00 right.
- 0.91 Property line (into BLM). End segment B.

Segment C (BLM) ASC

MP Remarks

- 0.95 Jct. w/ 34-3E-19.01 right.
- 1.06 Property line (into Private). End segment C.

Segment D (Private) ASC

MP Remarks

- 1.24 Jct. w/ private road left.
- 1.33 Property line (into BLM). End segment D.

Segment E (BLM) ASC

MP Remarks

1.78 Jct. w/ 34-3E-19.03 right. End road renovation and roadside brushing.

FS 34 (Lodgepole Road)

(Forest Service) BST

M.P. Remarks

- 0.00 Jct. w/ Bute Falls Prospect Highway. Begin cleaning ditch lines and culverts where needed and roadside brushing and chipping.
- 2.43 Jct. w/ 34-3E-12.00 right. End cleaning ditch lines and culverts where needed and roadside brushing and chipping.

Temp Road 31-5 (T33S, R03E, Section 31) (BLM) NAT

Sta Remarks

- 0+00 Jct. w/33-3E-31.05. Begin cut and fill construction for a 14' wide outsloped temporary road. Construct water bars every 100' and seed and mulch all disturbed areas prior to October 15th of the same year it is constructed.
- 9+50 Construct landing. End temporary route construction.

Temp Road 32-1 (T33S, R03E, Section 31) (BLM) NAT

Sta Remarks

- 0+00 Jct. w/33-3E-28.00. Begin temporary road reconstruction and roadside brushing of existing road prism. Re-construct barricade at station 0+50, re-construct water bars every 100', and seed and mulch all disturbed areas prior to October 15th of the same year it is constructed.
- 12+67 Construct landing. End temporary route construction.

TIMBER SALE ROAD SPECIFICATIONS

TABLE OF CONTENTS

SECTION	DESCRIPTION	Page(s)
100	General	2-8
200	Clearing and Grubbing	9-12
300	Excavation and Embankment	12-15
400	Pipe Culverts	15-17
500	Renovation and Improvement of Existing Roads	18-19
600	Watering	19-20
900	Aggregate Base Course - Screened Rock	20-22
1200	Aggregate Surface Course - Crushed Rock	22-25
1400	Slope Protection	25-26
1600	Quarry and Borrow Pit Development	26-29
1700	Erosion Control	29-31
1800	Soil Stabilization	31-35
2100	Roadside Brushing	35-36

GENERAL – 100

101 - Prework Conference(s):

A prework conference will be held prior to the start of new construction, improvement, renovation, surfacing, and seeding/mulching 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:

<u>AASHTO</u> - American Association of State Highway and Transportation Officials. Current editions of tests and specifications.

<u>Abrasion Resistance</u> - The ability of a fabric surface to resist wear by friction.

ACI - American Concrete Institute

<u>Apparent Opening Size (AOS)</u> - 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.

<u>Base Course</u> - 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.

<u>Burst Strength</u> - 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.

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

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

<u>End Haul</u> - Excavated material moved, other than by dozer, to an embankment or waste area to prevent side-casting material outside of the road prism.

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

<u>Grab Tensile Strength</u> - 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-inchwide strip of geotextile material, with the tensile load applied at the midpoint of the geotextile material width through 1-inch-wide jaw faces.

<u>Grading</u> - 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.

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

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

<u>Penetration Resistance</u> - 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.

<u>Percent Open Area</u> - 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.

<u>Permeability</u> - 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.

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

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

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

<u>Puncture Resistance</u> - 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.

<u>Purchaser</u> - 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.

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

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

<u>Roadbed</u> - 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.

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

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

<u>Roadway (Road Prism)</u> - 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.

<u>Scale</u> - 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.

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

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

<u>Shoulder</u> - 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.

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

<u>Specific Gravity</u> - 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.

<u>Structures</u> - 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.

<u>Subbase</u> - 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.

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

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

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

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

<u>Tensile Test</u> - 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.

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

<u>Typical Cross Sections</u> - 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.

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

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

<u>Unaged Cloth</u> - Cloth in condition received from the manufacturer or distributor.

<u>Woven Geotextile Material</u> - 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.	
<u>ASTM D 4564</u>	Determination of relative density of cohensionless soils.	
<u>DMSO (dimethyl sulfide)</u> Determines volume of expanding clays in aggregates. Usually associated with marine basalts.		

- 103 Compaction equipment shall meet the following requirements:
- Sheepfoot and Tamping 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.

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 <u>Vibratory compactor</u>. 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.
- 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

- 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.
- This work shall consist of clearing, grubbing, removing and disposing of vegetation, debris, surface objects, and protruding obstructions from borrow pits, quarries, channel changes, stockpile sites, etc., in accordance with these specifications and as staked on the ground.
- 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.
- Where clearing limits for quarries have not been staked or shown on the plans, the limits shall extend 10 feet back of the top of the cut slope and 5 feet outside of the outside slope lines.
- Clearing shall consist of the removal and disposal of trees, logs, rotten material, brush, and other vegetative materials and surface objects in accordance with these specifications and within the limits established for clearing as specified under Subsections 202 and 202b, as shown on the plans, as staked on the ground, and as posted.
- 203b Standing trees and snags to be cleared shall be felled within the limits established for clearing unless otherwise authorized.
- 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, 204b, 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.
- 204b Stumps and other protruding objects shall be completely removed within the limits of required embankments having heights of less than 4 feet.
- 204c On excavated areas, roots and embedded wood shall be removed to a depth not less than 6 inches below the subgrade.
- 204d On areas to be occupied by embankments having heights greater than 4 feet, no stump or portion thereof shall remain within 3 feet of embankment subgrades or slope surfaces

after grubbing is completed.

- 204e Roots and embedded wood material shall be removed to a depth not less than 1 foot below embankment subgrades or slope surfaces.
- 205 Clearing and grubbing debris shall not be placed or permitted to remain in or under road embankment sections.
- Clearing and grubbing debris shall be disposed of by chipping in accordance with Subsection 209 and/or piling in accordance with Subsection 211 and at the following road locations:

Road No.	From M.P./Sta	To M.P./Sta	Activity Type	Disposal Method
33-3E-28.00 E1	0.00	0.51	Rdside Veg. Maint.	Pile
33-3E-28.00 E2	0.00	0.41	Rdside Veg. Maint.	Pile
	0.45	0.65	Rdside Veg. Maint.	Pile
33-3E-31.01	0.10	0.31	Rdside Veg. Maint. Pile	
33-3E-31.02	0.00	0.37	Rdside Veg. Maint.	Pile
33-3E-31.03	0.00	0.60	Road Improvement	Pile
33-3E-31.05	0.00	0.56	Road Improvement	Pile
33-3E-31.08	0+00	22+87	Road Construction	Pile
33-3E-32.00	0.41	0.51	Rdside Veg. Maint.	Pile
33-3E-32.02 A2	0.18	0.28	Road Improvement	Pile
33-3E-32.02 B	0+00	7+37	Road Construction	Pile
34-2E-29.00 C	0.00	0.15	Rdside Veg. Maint.	Pile
	0.20	0.54	Rdside Veg. Maint. Pile	
34-3E-05.00	0.00	0.39	Rdside Veg. Maint.	Pile
34-3E-05.02	0.00	0.32	Rdside Veg. Maint.	Pile
34-3E-05.04	0.00	0.66	Rdside Veg. Maint.	Pile
34-3E-07.00	0.00	0.17	Rdside Veg. Maint.	Pile
	0.35	0.73	Rdside Veg. Maint.	Pile
34-3E-07.01	0.00	0.71	Rdside Veg. Maint.	Pile
	0.75	1.30	Rdside Veg. Maint.	Pile
34-3E-07.02	0.00	0.68	Rdside Veg. Maint.	Pile
34-3E-07.04	0.00	0.40	Rdside Veg. Maint.	Pile
34-3E-09.00 A-B	0.00	0.64	Rdside Veg. Maint.	Pile
	1.62	1.69	Rdside Veg. Maint.	Pile
	1.74	258	Rdside Veg. Maint.	Pile
	3.76	4.00	Rdside Veg. Maint.	Pile
34-3E-09.02	0.02	0.80	Rdside Veg. Maint.	Pile
34-3E-09.03	0.08	0.08	Quarry Pile Development	
34-3E-18.00 C	0.78	.78 1.07 Rdside Veg. Ma		Pile
	1.17	1.54	Rdside Veg. Maint.	Pile
	1.81	2.02	Rdside Veg. Maint.	Pile

	2.07	2.22	Rdside Veg. Maint.	Pile
	2.29	2.62	Rdside Veg. Maint.	Pile
	2.65	2.90	Rdside Veg. Maint.	Pile
	2.93	2.97	Rdside Veg. Maint.	Pile
	3.01	3.25	Rdside Veg. Maint.	Pile
Temp Road 31-5	0+00	9+50	Road Construction	Pile
Temp Road 32-1	0+00	12+67	Road Construction	Pile

- 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. 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.

- 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.
- Clearing debris shall be placed outside the roadway in a neat, compacted windrow laid approximately parallel and along the toe-line of embankment slopes. The top of the windrow shall not extend above the subgrade. Material in the windrow shall be matted down with construction equipment to form a compact and uniform pile. Windrows shall have 16-foot minimum breaks at least every 150 feet. Windrows shall not be placed against trees. A pioneer road may be constructed to provide an area for placement of windrows provided the excavated material is kept within the clearing limits and does not adversely affect the road construction.
- Disposal of clearing and grubbing debris or 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.
- 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

- 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.
- Excavation shall also consist of the excavation of road and landing cut sections, borrow sites, backfilling, leveling, ditching, grading, compaction, and other earth moving work necessary for the construction of the roadway in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and as marked on the ground with stakes or metal tags.
- 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.
- 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.
- Embankment construction shall consist of the placement of excavated and borrowed materials, backfilling, leveling, grading, compaction, and other earth- moving work necessary for the construction of the roadway and landings in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and as marked on the ground with stakes.
- 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.
- 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.

Layers of embankment, 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 and in accordance with the following table:

Road No.	From Sta./M/P.	To Sta./M.P.	Subsection 306
33-3E-31.08	0+00	22+87	306 e
33-3E-32.02 B	0+00	7+37	306 e
Temp 31-5	0+00	9+50	306 f
Temp 32-1	0+00	12+67	306 f

- 306a Minimum compaction for each layer of embankment, selected borrow, and selected roadway excavation material placed at optimum moisture shall be 1 hour of continuous compacting for each 150 cubic yards in place or fraction thereof.
- The final subgrade except landings and temporary roads 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 8 stations of road or a fraction of as measured along the center line of the constructed road. Landings and temporary roads shall be compacted by routing construction equipment over full width.
- Compaction of embankment layers placed as specified under Subsection 305b above shall be accomplished by routing construction equipment over full width of embankment structures except as specified in Subsection 306.
- 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.
- 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.
- 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.
- 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.

- 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.
- 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.
- Borrow material from sources selected at the Purchaser's option shall be inspected and approved in writing by the Authorized Officer prior to placement.
- 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.
- 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.
- 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.
- 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.
- 323 In the construction of channel changes and stream-crossing embankment sections,

natural stream flow shall be maintained unless otherwise provided.

- Excavated material shall not be allowed to cover boles of standing trees to a depth in excess of 1 foot on the uphill side.
- The finished grading shall be approved in writing by the Authorized Officer in segments. The Purchaser shall give the Authorized Officer 3 days notice prior to final inspection of the grading operations and start of surfacing operations.
- The Purchaser shall adopt methods and procedures in using explosives, which will prevent damage to adjacent landscape features, and which will minimize scattering rocks and other debris outside the road prism.

PIPE CULVERTS – 400

- This work shall consist of furnishing and installing pipe culverts, splash pads, and full round downspouts in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans. Individual lengths and locations are approximate; final lengths and locations will be determined by the Authorized Officer upon installation of the appurtenance structures. Additional pipe and erosion control devices may be required at the option of the Authorized Officer, in which case a reduction in the total purchase price shall be made to offset the cost of furnishing and installing such items. Costs will be based upon the unit prices set forth in the current BLM Timber Appraisal Production Cost Schedule. See Exhibit C-10, Culvert List, for locations.
- Grade culverts shall have a gradient of from 2 percent to 4 percent greater than the adjacent road grade. Grade culverts shall be skewed down grade 30 degrees as measured from the perpendicular to the centerline unless otherwise specified on the plans.
- Damage to the spelter, or burn back in excess of 3/8 inch, shall be wire brushed and painted with two coats of zinc-rich paint on zinc-coated, steel pipe and aluminum-rich paint on aluminum or aluminum-coated pipe.
- 405a Corrugated-**aluminized** steel-welded pipe culverts and pipe-arch culverts and special sections shall conform to the requirements of AASHTO M 36 and AASHTO M 218, AASHTO M 274, or AASHTO M 289 as specified on the plans.
- Coupling bands shall conform to the requirements of AASHTO M 36 and AASHTO M 218 or AASHTO M 274 with the exception of band widths and the "Hugger"-type band which shall conform to the details, dimensions, and typical diagram shown on the plans.

- 406a "Hugger"-type coupling bands shall only be used with annular corrugated pipe and pipe-arch culverts, or helically corrugated pipe and pipe-arch culverts having annular reformed ends. Annular reformed ends shall consist of two annular corrugations.
- 407b Full round culvert downspouts conforming to the material and construction requirements shall be constructed for culverts as shown on the plans and at the specified locations at the following locations:

Road No.	M.P.	Connection Type
34-3E-09.00 F	3.00	Turner Style
34-3E-18.00 C	0.60	Turner Style

- Pipe culverts and pipe-arch culverts shall be placed on the bed starting at the downstream end with the inside circumferential laps pointing downstream and with the longitudinal laps at the side or quarter points. Coupling bands of the type required under these specifications shall be installed so as to provide the circumferential and longitudinal strength necessary to preserve the pipe alignment, prevent separation of the pipe sections, and minimize infiltration of fill material.
- Pipe shall be unloaded and handled with reasonable care. If the Authorized Officer determines any structure is damaged to the extent that it is unsuitable for use in the road construction, it shall be replaced at the Purchaser's expense.
- Trenches necessary for the installation of pipe culverts shall conform to the lines, grades, dimensions, and typical diagram included in the plans and Exhibit C-11 (Culvert Installation Detail Sheet).
- Where ledge rock, boulders, soft, or spongy soils are encountered, they shall be excavated a minimum of 24 inches below the invert grade for a width of at least one pipe diameter or span on each side of the pipe and shall be backfilled with selected granular or fine readily compactable soil material or crushed rock material in accordance with Section 1200 gradation C.
- Pipe culverts and pipe-arch culverts shall be bedded on a selected granular, crushed rock material in accordance with Section 1200 gradation C, or fine readily compactable soil material having a depth of not less than 6 inches as shown on plans. Foundation material shall be of uniform density throughout the length of the structure and shall be shaped to fit the pipe.
- Inspection of pipe culverts having a diameter of 48" or larger shall be made before backfill is placed. Culverts found to be out of alignment or damaged shall be replaced, reinstalled or repaired as directed by the Authorized Officer at the Purchaser's expense.
- Side-fill material for pipe culverts shall be placed within 1 pipe diameter, or a minimum of 2 feet, of the sides of the pipe barrel, and to 1 foot over the pipe with

fine, readily compactable soil, crushed rock material in accordance with Section 1200 gradation C, or granular fill material free of excess moisture, muck, frozen material, roots, sod, or other deleterious or caustic material and devoid of rocks or stones of sizes which may impinge upon and damage the pipe or otherwise interfere with proper compaction.

- For pipe culverts, side-fill material conforming to the requirements of Subsection 416 shall be placed and compacted under the haunches of the pipe, and shall be brought up evenly and simultaneously on both sides of the pipe to 1 foot above the pipe, in layers not exceeding 8 inches in depth and 1 pipe diameter/span, or a minimum of 1 feet in width each side of, and adjacent to, the full length of the pipe barrel. Each layer shall be moistened or dried to a uniform moisture content suitable for maximum compaction and immediately compacted by approved hand or pneumatic tampers.
- Side fills beyond the compaction limits specified under Subsection 417 shall be compacted as specified under Section 300.
- The pipe culverts after being bedded and backfilled as required by these specifications shall be protected by a 1.5-foot cover of fill before heavy equipment is permitted to cross the drainage structures. Removal of the protection fill shall be as directed by the Authorized Officer.
- Construction of catch basins and ditch dams conforming to lines, grades, dimensions and typical diagrams shown on the plans, shall be required for culverts.
- Construction of splash pads conforming to lines, grades, dimensions and typical diagram shown on the plans, shall be required for culverts.
- Where pervious materials are used for backfill and bedding, collars consisting of selected impervious material shall be placed at the inlet and at various intervals along the pipe barrel as shown on the plans and as directed by the Authorized Officer.
- Record culvert sizes, lengths and location actually installed on a copy of the culvert list. This culvert list shall be furnished to the Authorized Officer.
- Remove and dispose of old culverts in a legal manner, and for any fees required. The Purchaser shall remove the old culverts from the work site prior to road acceptance.
- Keep the excavation site dewatered so that the installation of culverts is completed under dry conditions. Dispose of excess water by using pumping or natural drainage ways near the site. Provide for downstream waterflow with no more that 10% increase in natural stream turbidity due to transport of excavated material or sediment during construction. Diversion streams shall not be returned to the natural channel until all instream work has been completed.

RENOVATION AND IMPROVEMENT OF EXISTING ROADS - 500

- 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, shown on the plans, and as marked on the ground with stakes.
- 501a This work shall include the removal and disposal of slides in accordance with these specifications and as marked on the ground with stakes.
- 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 and as marked on the ground with stakes.
- 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 slide at the following locations:

Road No.	M.P.
34-3E-07.01	0.96

shall be hauled to a designated disposal site at the following locations:

Road No.	M.P.	Comments
34-3E-07.04		Place material on far east side of quarry floor.

as shown on the plans and marked on the ground.

- Scarified material and existing road surface shall be uniformly moistened or dried to the optimum moisture content suitable for maximum density and compacted to full width with equipment conforming to requirements of Subsections 103f, 103g, 103h, and 103i and in accordance with Subsection 504a.

- 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.
- The inlet end of existing drainage structures shall be cleared of vegetative debris and boulders that are of sufficient size to obstruct normal stream flow. Pipe inverts shall be cleared of sediment and other debris lodged in the barrel of the pipe. The outflow area of pipe structures shall be cleared of rock and vegetative obstructions which will impede the structure's designed outflow configuration. Catch basins shall conform to the lines, grade, dimensions, and typical diagram shown on the plans.
- New drainage structures at the following locations shall be placed with structures of the type, gauge, diameter, and length shown on the plans and in accordance with the placement requirements set forth under section 400 of these specifications.
- Vegetation encroaching on the roadbed and the drainage ditches of existing roads shall be removed by cutting and disposed of in accordance with Subsection 2100 of these specifications.
- 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 notice 3 days prior to final inspection of the grading operations.

WATERING - 600

- 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.
- 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.
- 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.
- Water required under these specifications can be obtained at the locations indicated below:

G V	Willa	mette Me	ridian	D 111	14.5	
Common Name	Sec.	T.	R.	Road No.	M.P.	
Blue Goose Spring	29	33S	03E	33-3E-28.00 B	1.77	
Beaver Dam Creek	33	33S	03E	33-3E-28.03	0.45	
No Name	07	34S	03E	34-3E-18.00 C	0.40	
Jackass Creek #3	07	34S	03E	34-3E-18.00 C	0.62	
One Fifth Mile	13	34S	03E	34-3E-13.00	0.15	

Use of water sources are subject to applicable State water regulations.

- 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 BASE COURSE - 900 SCREENED ROCK MATERIAL

- This work shall consist of furnishing, hauling, and placing one or more lifts of screened rock material on roadbeds and landings approved for placing screened rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans.
- Screened rock materials used in this work shall be obtained from the source shown on the plans. Development and mining of such source shall be in accordance with Subsection 1601 and Subsection 1602.
- 902a Screened rock materials to be used in this work may be obtained from sources selected by the Purchaser, at his option, providing the rock materials furnished comply with these specifications and the sources are approved in writing by the Authorized Officer prior to use.
- 903 Screened rock material shall conform to the following gradation requirements:

Table 903

SCREENED ROCK MATERIAL GRADATION REQUIREMENTS Percentage by Weight Passing Square Mesh Sieves

(AASHTO T 27)

Sieve	Gradation
-------	-----------

Designation				
	A	В	C	D
4 inch	100			
3 inch	95-100	100		
2 inch		95-100	100	
1-1/2 inch			95-100	100
1 inch				95-100
No. 4	11-44	16-49	21-54	26-59
No. 200	2-15	2-15	0-15	0-15

- Screened 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.
- 904a Screened rock material shall show a durability value of not less than 35 as determined by AASHTO T 210.
- The roadbed as shaped and compacted under sections 300 and 500 of these specifications, shall be approved in writing by the Authorized Officer prior to placement of screened rock materials. Notification for final inspection, prior to rocking, shall be 72 hours prior to that inspection and shall be 10 days prior to start of rock operations.
- Screened rock material shall be placed in layers not to exceed 6 inches in thickness.
 Where the required total thickness is more than 6 inches, the rock material shall be shaped and compacted in two or more layers of approximately equal thickness.
- 906a Screened rock materials used to repair or reinforce a soft, muddy, frozen, yielding, or rutted subgrades shall not be construed as surfacing under this specification.
- Filler or binder material obtained from sources shown on the plans and approved by the Authorized Officer shall be uniformly blended with the screened rock material on the road. Filler or binder materials shall be free from stones, vegetative matter, and other deleterious materials.
- 908 Screened rock material shall be blade-processed and spread to required dimensions. Processing shall be performed in such a manner as to minimize

aggregate segregation.

Screened rock material, bladed and shaped as specified, shall be moistened or dried to optimum moisture content for maximum compaction and compacted to full width by compaction equipment conforming to the requirements of Subsections 103f, 103g, 103h, and 103i. Minimum compaction shall be 6 passes over each full-width layer, or fraction thereof.

AGGREGATE SURFACE COURSE - 1200 CRUSHED ROCK MATERIAL

- 1201 This work shall consist of furnishing, hauling, and placing one or more layers of crushed rock material on roadbeds and base courses approved for placing crushed rock material in accordance with these specifications and conforming to the dimensions and typical cross sections shown on the plans. Material not conforming to these specifications will be rejected, and shall be removed from the road at the purchaser's expense.
- 1202 Crushed rock materials used in this work shall consist of quarry rock, stone, gravel, or other approved materials obtained from the source shown on the plans.
 Development and mining of such source shall be in accordance with Subsection 1601 and Subsection 1602 of these specifications.
- 1202a Crushed rock materials used in this work may be obtained from commercial sources selected by the Purchaser at his option and expense, providing the rock materials furnished comply with the specifications.
- 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 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 27
GRADATION

Sieve Designation	С	C-1	D	D-1	Е	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	30-50	30-60	36-60	40-75	44-70
No. 8	í	22-43	ī	25-47	í	30-54
No. 30	-	_	-	12-31	-	15-34
No. 40	5-25	15-25	5-30	-	5-35	_
No. 200	2-15	6-14	3-15	3-15	2-15	3-15

- The Purchaser shall be required to take one sample for each 1,000 cubic yards of crushed rock material to be utilized or a minimum of 1 sample per day, using AASHTO sampling procedures. The Purchaser shall submit samples to a certified lab or perform testing for gradation requirements using AASHTO T 11 and AASHTO T 27 testing procedures. Prior to testing, each sample shall be split, making one half of the sample, with proper identification, available for testing by the Authorized Officer. Each sample and the results of Purchaser testing shall be made available to the Authorized Officer within 24 hours of sampling. The Purchaser shall provide test results for the first 500 cubic yards produced prior to commencing production crushing and hauling.
- 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 approved by the Authorized Officer and shall be free from stones, vegetative matter, and other deleterious materials.

- 1208a Each layer of crushed rock material shall be thoroughly mixed on the roadbed by alternately blading, to full depth, until a uniform mixture has been obtained. The mixture shall then be spread to full width. When completed, the spreading shall produce a surface which is smooth, presents uniform shoulder lines, and conforms to the specified cross section.
- 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 for placing on the roadbed and landings and Subsection 900 for placing on the base course. Notification for final inspection prior to rocking shall be 72 hours prior to the inspection and shall be 10 days prior to start of surfacing operations.
- Crushed rock material conforming to the requirements of these specifications shall be placed on the approved roadbed in accordance with these specifications and conforming to the lines, grades, dimensions, and typical cross sections shown on the plans and staked on the ground. Compacted layers shall not exceed 4 inches in depth. When more than one layer is required, each shall be shaped, processed, compacted, and approved 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.
- 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, and 103i. Minimum compaction shall be 1 hour of continuous compacting for each 5 stations, or fraction thereof.
- 1215 The Purchaser is authorized to remove crushed rock material from BLM stockpiles for placement on the roads in accordance with the requirements and details shown on the plans and as follows:

Stockpile	Willamette Meridian			Available	D 111	14.5
No.	Sec.	T.	R.	Cu.	Road No.	M.P.

				Yds.		
1	31	33S	03E	150	33-3E-28.00 E1	0.23
2	07	34S	03E	150	34-3E-07.04	0.38
3	12	34S	03E	50	34-3E-12.03	0.05
4	19	34S	03E	750	34-3E-19.03 A	0.18

The Purchaser shall maintain records of material removed from each of the stockpile sites designated above. These records shall be submitted to the Authorized Officer upon completion of the surfacing operation.

SLOPE PROTECTION - 1400

- This work shall consist of furnishing, hauling, and placing stone materials for splash pads 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.
- 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	Approximate Weight
	inches	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
1/2	9.5 x 9.5 x 9.5	88
1/3	8.3 x 8.3 x 8.3	60
1/4	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

	TABLE		
	Approx. Cubic	Sphere	% of Total
Class	Dimension	Diameter	Volume Smaller than
	(inches)	(inches)	Size of Stone
	6-8	8	100
1	5-6	6	80
1	2-5	6	50
	0-2	2	10
	8-10	12	100
2	6-8	8	80
2	3-6	6	50
	0-3	4	10
	14-16	21	100
2	10-14	18	80
3	5-10	12	50
	0-5	6	10
	18-20	24	100
4	14-18	22	80
4	6-14	18	50
	0-6	8	10
	26-28	36	100
_	20-26	32	80
5	8-20	25	50
	0-8	10	10
	28-34	42	100
	22-28	34	80
6	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 by the Authorized Officer.

QUARRY AND BORROW PIT DEVELOPMENT - 1600

1601 - This work shall consist of a **quarry development and blasting plan to be submitted to the Authorized Officer**, quarry development, and quarry rehabilitation in accordance with these specifications.

1602 - The designated rock quarry site is located at the following locations:

	Willamette Meric	dian	
Subdivision	Sec.	T.	R.
SW1/4NE1/4	09	34S	03E

shall be developed and mined in strict accordance with these specifications and the mining and reclamation plan shown on the plans. The Purchaser shall perform reclamation work in accordance with the requirements of Subsection 1617, as shown on the plans, and as directed by the Authorized Officer.

- 1603 If the Purchaser elects to use a rock source other than the designated source, the rock material produced shall comply with applicable sections of these specifications. If the alternate source is located on BLM ownership and a current BLM plan is not available, a development, mining, and reclamation plan shall be prepared by the Purchaser, and submitted for approval by the Authorized Officer. Development, mining and reclamation work shall be in accordance with the approved plan and 1600 specifications.
- 1604 If the designated source proves insufficient as to quantity and quality of the required rock material, the Purchaser shall, when ordered in writing by the Authorized Officer, move his operation to an alternate materials source. Development, extraction, and reclamation work on the alternate source shall be in accordance with the mining. An equitable adjustment will be made in the contract price.
- 1605a Quarry access roads to the designated or approved rock sources located on public land shall be constructed to the minimum necessary for rock hauling operations, with adequate drainage facilities to minimize channeling and soil erosion. Required road construction, except surfacing, shall be completed prior to the removal of road embankment or surfacing materials.
- Slash, stumps, logs, and other organic debris from quarry operations shall be piled and burned in accordance with the requirements of Subsections 207 and 207a.
- 1608 Overburden or reject material which does not conform to the requirements of Sections 900 and 1200 shall be stockpiled and used or reclamation backfill.
- Overburden, trees, stumps, logs, and loose rock shall be removed back from the edge of working quarry faces for a minimum distance of 20 feet.

- Waste disposal sites shall be selected and prepared to minimize erosion and establish conditions conducive to vegetative growth. Disposal areas shall be seeded and mulched in accordance with the requirements set forth in Section 1800 of these specifications.
- 1611 The Purchaser shall notify the Authorized Officer in writing at least 7 days prior to commencing quarry operations.
- 1611a The Purchaser shall not commence production drilling or crushing until the Authorized Officer has inspected and approved the site development in writing.
- The Purchaser shall notify MSHA (Mining Safety and Health Administration) by standard form or telephone, and in accordance with part 56, Chapter 1 of Title 30 Code of Federal Regulations (CFR), of what date he intends to commence, terminate, and/or temporarily close down operations of the quarry. Notice shall be submitted a minimum of 10 days prior to the proposed date of the action to be taken. Notification shall be submitted to:

Mining Safety and Health Administration Albany, OR 97321 or Mining Safety and Health Administration Bellevue, WA 98004

The Purchaser shall also prepare and submit to MSHA the quarterly Employment Report and Injury and Illness Report for the mining operation.

- 1613 The Purchaser shall comply with local and State Safety Codes covering quarrying operations, warning signs, seismic monitoring, and traffic control. All quarrying operations will be conducted by appropriately licensed personnel; i.e., blasting and powder handler's license, etc.
- The Purchaser shall submit a written blasting plan or modification of the plan to the Authorized Officer for the Vine Maple Quarry, 7 working days prior to the start of drilling. The plan shall include: a) cross sections of the quarry removal area; b) plan view of delay pattern; c) cross section of a typical loaded hole; d) types of explosives; e) powder factor; f) burden spacing, hole diameter, depth of holes, and depth of subdrill; and g) number of lifts. Acceptance of the blasting plan does not relieve the Purchaser of the liability or responsibility for the results of the blasting.
- 1613b Controlled blasting techniques shall be employed during production blasting to contain blasted rock.
- 1613c The Purchaser shall submit to the Authorized Officer a blasting log showing "as

built" data and a brief summary of the blasting results, within 10 days after blasting.

- 1614 Rock materials extracted from the quarry walls shall be utilized or disposed of as shown on the plans. Secondary blasting or other methods shall be employed to reduce (75) percent of the quarried rock to a maximum (24) inches in any dimension.
- 1614a Existing and oversized rock on the quarry floor shall be utilized before drilling and shooting new rock. Oversized boulders shall not be wasted but shall be broken and utilized concurrent with acceptable material.
- Operations on the quarry site shall be so conducted that, both during and after completion of work, erosion will be minimized and sediment will not enter streams or other bodies of water. Waste or disposal areas and quarry access roads shall be located, constructed, and maintained in a manner that will prevent sediment from entering live streams or other bodies of water. Noncombustible debris and silt-laden water material resulting from the quarry operations shall be placed in such waste or disposal areas as directed by the Authorized Officer.
- 1616 Upon completion of quarrying operations, overburden and waste materials shall be disposed of in accordance with requirements of the approved reclamation plan or in a manner approved in writing by the Authorized Officer.
- 1617 Upon completion of quarrying operations, required site reclamation measures shall be performed to the satisfaction of the Authorized Officer, including but not limited to the following:
 - (a) Permanently seal or fill unused drill holes as directed by the Authorized Officer. Follow State of Oregon Department of Water Resources guidelines and requirements.
 - (b) Construct waterbars and take other erosion control measures as directed by the Authorized Officer.
 - (c) Remove blockages from drainage systems, streams, and waterways, and restore streams and waterways to their original courses. Follow State of Oregon guidelines and requirements.
 - (d) Erect barricades on quarry access roads as directed by the Authorized Officer.
 - (e) Complete required site-reclamation measures within 14 days after final cessation of quarrying operations.
 - (f) Clear quarry benches and scale wall of loose or dislodged shot material and move to a designated location within the quarry.

EROSION CONTROL - 1700

1701 - This work shall consist of measures to control soil erosion or water pollution during

the construction operation through the use of berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains, and other erosion control devices or methods in accordance with these specifications and conforming to the lines, grades, dimensions and typical cross sections shown on the plans.

- 1704 The erosion control provisions specified under this Subsection shall be coordinated with the Soil Stabilization requirements of Section 1800.
- 1705 The surface area of erodible earth material exposed at any one time by clearing and grubbing shall not exceed 21,780 square feet (0.50 acres) after October 15 without prior approval by the Authorized Officer.
- 1706 The surface area of erodible earth material exposed at one time by excavation, borrow, or fill within the right-of-way shall not exceed 21,780 square feet (0.50 acres) after October 15 without prior approval by the Authorized Officer.
- 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 locations:

Road No.	From Sta./M.P.	To Sta./M.P.
33-3E-31.08	0+00	22+87
33-3E-32.02 B	0+00	7+37
Temp 31-5	0+00	9+50
Temp 32-1	0+00	12+67

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

- 1708 Newly constructed roads to be carried over the winter period, shall be water barred and 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 (splash pads) conforming to the requirements and details shown on the respective exhibits.
- Where newly constructed logging spur roads join with existing surfaced roads, the Purchaser shall construct a sag in the spur road profile and install a culvert in accordance with the requirements and details as shown on the plans.

SOIL STABILIZATION – 1800

- 1801 This work shall consist of seeding and mulching on designated cut, fill, borrow, disposal, and special areas in accordance with these specifications. This work is not 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:

Road No.	From M.P.	То М.Р.	Reason
33-3E-28.00 E1	0.00	0.51	Roadside Veg Maintenance
33-3E-28.00 E2	0.00	0.41	Roadside Veg Maintenance
	0.45	0.65	Roadside Veg Maintenance
33-3E-31.01	0.10	0.31	Roadside Veg Maintenance
	0.15	0.15	Culvert Replacement
	0.33	0.33	Armored Water Dip
	0.42	0.42	Culvert Replacement
33-3E-31.02	0.00	0.37	Roadside Veg Maintenance
33-3E-31.03	0.00	0.60	Road Improvement
33-3E-31.05	0.00	0.56	Road Improvement
33-3E-31.08	0+00	22+87	New Road Construction
33-3E-32.00	0.21	0.21	Culvert Replacement
	0.38	0.38	Culvert Replacement
	0.41	0.51	Roadside Veg Maintenance
	0.62	0.62	Culvert Replacement
33-3E-32.02 A2	0.07	0.28	Road Improvement
33-3E-32.02 B	0+00	7+37	New Road Construction
34-2E-29.00 C	0.00	0.15	Roadside Veg Maintenance
	0.17	0.17	Culvert Replacement
	0.20	0.54	Roadside Veg Maintenance

Exhibit C-21 Round Mountain South T.S. Page 32 of 36

34-3E-05.00	0.00	0.39	Roadside Veg Maintenance
	0.53	0.53	Culvert Replacement
34-3E-05.01	0.09	0.09	Culvert Replacement
	0.22	0.22	Culvert Replacement
34-3E-05.02	0.00	0.32	Roadside Veg Maintenance
	0.08	0.08	Armored Water Dip
	0.21	0.21	Armored Water Dip
34-3E-05.04	0.00	0.66	Roadside Veg Maintenance
34-3E-07.00	0.00	0.17	Roadside Veg Maintenance
	0.07	0.07	Culvert Replacement
	0.19	0.19	Culvert Replacement
	0.29	0.29	Culvert Replacement
	0.35	0.73	Roadside Veg Maintenance
	0.43	0.43	Culvert Replacement
34-3E-07.01	0.00	0.71	Roadside Veg Maintenance
	0.59	0.59	Culvert Replacement
	0.73	0.73	Culvert Replacement
	0.75	1.30	Roadside Veg Maintenance
	0.96	0.96	Slide Removal
	1.15	1.15	Armored Water Dip
	1.22	1.22	Armored Water Dip
	1.32	1.32	Culvert Replacement
34-3E-07.02	0.00	0.68	Roadside Veg Maintenance
34-3E-07.03	0.00	0.43	Roadside Veg Maintenance
34-3E-07.04	0.04	0.40	Roadside Veg Maintenance
	0.10	0.10	Culvert Replacement
	0.37	0.37	Waste Disposal Site
34-3E-09.00 A-F	0.00	0.64	Roadside Veg Maintenance
	0.20	0.20	Culvert Replacement
	1.44	1.44	Culvert Replacement
	1.62	1.69	Roadside Veg Maintenance
	1.72	1.72	Culvert Replacement
	1.74	2.58	Roadside Veg Maintenance
	3.00	3.00	Culvert Replacement
	3.76	4.00	Roadside Veg Maintenance
34-3E-09.02 B	0.02	0.80	Roadside Veg Maintenance
	0.11	0.11	Culvert Replacement
	0.30	0.30	Culvert Replacement
34-3E-09.03 A	0.08	0.08	Temp Culvert Installation & Quarry Development

34-3E-18.00 B-C	0.21	0.21	Culvert Replacement
	0.60	0.60	Culvert Replacement
	0.78	1.07	Roadside Veg Maintenance
	1.17	1.54	Roadside Veg Maintenance
	1.81	2.02	Roadside Veg Maintenance
	2.07	2.22	Roadside Veg Maintenance
	2.29	2.62	Roadside Veg Maintenance
	2.65	2.90	Roadside Veg Maintenance
	2.91	2.91	Culvert Replacement
	2.93	2.97	Roadside Veg Maintenance
	2.99	2.99	Culvert Replacement
	3.01	3.25	Roadside Veg Maintenance
	3.08	3.08	Culvert Replacement
Temp Road 31-5	0+00	9+50	New Construction
Temp Road 32-1	0+00	12+67	New Construction

- 1802a Soil stabilization work consisting of seeding and mulching shall be performed on new road construction, landings, disturbed areas, borrow sites, waste disposal sites, and specials areas 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)
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If soil stabilization of disturbed areas is not completed by the specified fall date, the Purchaser shall treat disturbed areas in accordance with Subsection 1707 and then complete the requirements of Section 1800 the next construction season.

The Authorized Officer may modify the above seasonal dates to conform to existing weather conditions and changes in the construction schedule.

- 1803a The Purchaser shall begin soil stabilization work within 10 days of the starting work date when notified by the Authorized Officer.
- 1806a Additional soil stabilization work consisting of seeding and mulching, may be required at the option of the Authorized Officer. Providing the additional stabilization is not due to Purchaser negligence as specified in 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 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 **11.95 acres** designated for treatment as shown on the plans and as specified under Subsections 1802 and 1806a, a mixture of grass seed and mulch material at the following rate of application:

a. Two Stage:

Grass Seed	20 lbs./acre
Mulch	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.
- 1817 At the beginning of each day's operation, a measured area will be seeded and mulched to assure uniform application.
- 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 C-15) of this exhibit, at designated locations as shown in the plans.
- 2102 Roadside brushing may be performed mechanically with self-powered, self-propelled equipment and/or manually with hand tools, including chain saws.
- 2103 Vegetation cut manually and/or mechanically less than 6 inches in diameter when measured at D.B.H. shall be cut to a maximum height of 1 inch above the ground surface or above obstructions such as rocks or stumps on cut and fill slopes and all limbs below the 2 inch area will be severed from the trunk.
- 2103a Vegetation shall be cut and removed from the road bed between the outside shoulders and the ditch centerline and such vegetation shall be cut to a maximum height of 1 inch above the ground and running surface. 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.
- Trees in excess of 6 inches in diameter at D.B.H. shall be limbed, so that no limbs extend into the treated area or over the roadbed to a height of 14 feet above the running surface of the roadway on cut and fill slopes, within the road prism- variable distance. Limbs shall be cut to within 1 inch of the trunk to produce a smooth vertical face. Removal of trees larger than 6 inches in diameter for sight distance or safety may be directed by the Authorized Officer.
- 2105 Vegetation that is outside of the road prism-variable distance that protrudes into the road prism and within 14 feet in elevation above the running surface shall be cut, to within 1 inch 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.
- 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.
- Debris resulting from this operation shall be scattered or chipped downslope from the roadway as indicated on Exhibit C-4 (Estimate of Quantities) and Exhibit C-20 (Road Renovation Worklist). Debris shall not be allowed to accumulate in concentrations. Debris in excess of 1 foot in length and 2 inches in diameter shall not be allowed to remain on cut slopes, ditches, roadways or water courses, or as directed by the Authorized Officer.
- Vegetation 6 inches and smaller in diameter shall be chipped where indicated on Exhibit C-4 (Estimate of Quantities) and Exhibit C-20 (Road Renovation Worklist). Chips shall be scattered downslope from the roadway. Vegetation over 6 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 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.

SPECIAL PROVISIONS

1. 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 CO prior to entering BLM lands. Provide 48 hours' notice of inspection to BLM prior to mobilization.

2. SOIL STABILIZATION:

- All disturbed soil shall be seeded and mulched. Purchaser 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.

3. DAMAGE:

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

4. 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.

5. WATER SOURCES:

- The Purchaser is responsible for obtaining water and associated rights and permits not listed in Exhibit C-21, Section 600 (Watering).

6. PERMITS:

- All permits required are the responsibility of the Purchaser.

7. CULVERT REMOVAL:

When removing culverts unless constructing armored water dips, pull slopes back to
the natural slope, or at least 1.5:1, 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. Apply seed and mulch to all disturbed or
exposed soils at each stream culvert removal site.

8. COMMERCIAL AGGREGATE

- If aggregate furnished for this work comes from a commercial source, then the aggregate shall be from an accredited weed free quarry or shall have been stockpiled in the period between November 1st and June 15th immediately prior to application. Aggregate which has been stockpiled between June 16th and October 31st of prior years will not be accepted. Aggregate crushed between June 16th and October 31st of the same application year shall not be stockpiled for more than two weeks before application.

9. ROAD RENOVATION:

- Road renovation shall generally take place between May 15th and October 15th of the same year. Waivers may be granted from the Authorized Officer for working outside of this time period. Seasonal restrictions for stream work and wildlife may still apply.
- Loose material cleaned from ditch lines and/or slide material shall not be sidecast or placed where it can enter wetlands, riparian reserves, floodplains, and waters of the State.
- Merchantable trees from culvert replacements at the following locations must be placed on the downstream side of the culvert replacement within the riparian area:
 - 1) 33-3E-31.01 at milepost 0.42
 - 2) 33-3E-32.00 at milepost 0.62
 - 3) 34-2E-29.00 C at milepost 0.17
 - 4) 34-3E-05.00 at milepost 0.53
 - 5) 34-3E-05.01 at mileposts 0.09 and 0.22
 - 6) 34-3E-07.00 at mileposts 0.19 and 0.29
 - 7) 34-3E-07.01 at mileposts 0.73 and 1.32
 - 8) 34-3E-09.00 E-F at mileposts 1.44, 1.72, and 3.00
 - 9) 34-3E-18.00 C at mileposts 2.91 and 2.99.

10. STREAMS:

- All in-stream work shall be done from June 15 thru September 15 both days included.
- Construct silt fences 25 and 50 feet below culvert replacement sites (on live streams) to trap sediment and prevent it from entering nearby stream channels.
- Live streams shall be diverted around or through the work area in a manner that will minimize sedimentation downstream. Keep excavation site dewatered so that installation of culverts can be carried out only under dry conditions. Dispose of excess water by using natural drainage ways or devices near the site to the extent of their natural capacity and in a manner that will avoid damage to adjacent property. Utilize dewatering methods such as temporary sediment traps and/or silt fences for areas to be excavated. Provide for downstream water flow without significant transport of excavated material or sediment during construction. At no time shall turbidity limits exceed DEQ's water quality standards.
- Ensure that all large wood is retained in the stream channel during culvert cleaning activities by moving logs which had accumulated on the stream side of a culvert to the downstream side of the culvert.

11. TEMPORARY ROUTES

- All temp routes and native surfaced roads (that were previously closed before timber sale activities began) shall be winterized if access is needed over two dry seasons by October 15th. Winterization includes water barring, seeding, mulching, and barricading. All temp routes shall be ripped, water barred, barricaded, seeded, and mulched after use unless otherwise specified.
- Clearing, grubbing, and excavation activities of temporary spur routes shown on Exhibit C shall be performed in accordance with Exhibit C-21.
- Construction of temporary spur routes shall be to a subgrade width of 14'.

12. WET SEASON HAUL

- The Purchaser may wet season haul, with the Authorized Officer's approval on the following roads: 33-3E-28.01 E1, 34-3E-09.00 A-F, 34-3E-09.02 A, 34-3E-09.03, 34-3E-12.00 A-C, 34-3E-12.01 A-B, 34-3E-12.03 A, 34-3E-13.00, 34-3E-19.03 A-B, 34-3E-29.01 A-E, and the FS 34 (Lodgepole Road). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul.
- The Purchaser may wet season haul on these roads that will be rocked under Exhibit C work, with the Authorized Officer's approval on the following roads: 33-3E-31.08, 34-3E-05.00, 34-3E-05.01, 34-3E-07.03, 34-3E-09.02 B, and the 34-3E-18.00 C (M.P. 2.11 → M.P. 3.52). If the use of these roads during the wet season causes or begins to cause road damage or the transport of sediment into streams, the Authorized Officer may suspend wet season haul or require additional erosion control devices to prevent damage or off-site transportation of sediment. Additional rock may be required at the Purchaser's expense to repair any damage that occurs to the road during wet season haul.
- The Purchaser shall have the option to rock road numbers 33-3E-28.00 E2-F, 33-3E-31.01, 33-3E-31.02, 33-3E-31.03, 33-3E-31.05, 33-3E-31.07A, 33-3E-32.00, 33-3E-32.01, 33-3E-32.02 A1-A2, 34-2E-29.00 C, 34-3E-01.00 B, 34-3E-03.00 B, 34-3E-05.02, 34-3E-05.04, 34-3E-05.05, 34-3E-07.00, 34-3E-07.01, 34-3E-07.02, 34-3E-07.04, 34-3E-09.02 C, and the 34-3E-18.00 A-C (M.P. 0.00 → M.P. 2.11), for wet weather haul. Purchaser option rocking depths will be determined and approved by the Authorized Officer. 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 show in Exhibit C of this contract.

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

ROUND MOUNTAIN SOUTH TIMBER SALE TRACT NO. ORMO5-TS-2021.0008

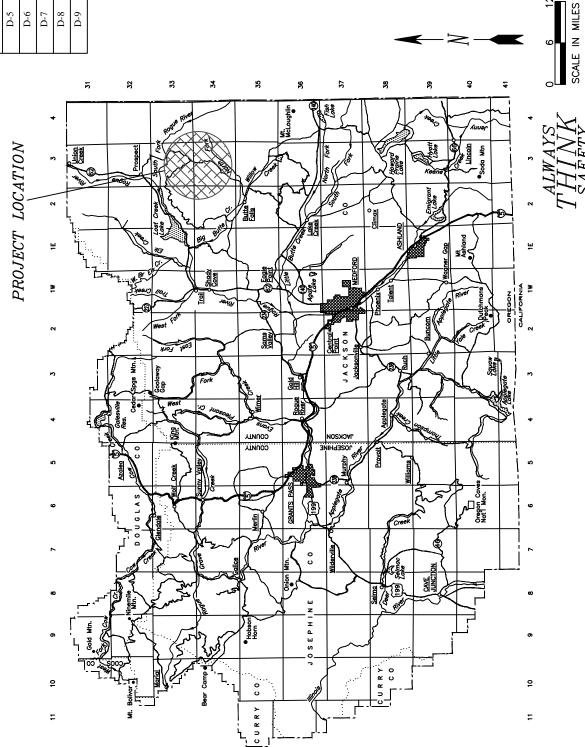


EXHIBIT D-1 SHEET 1 OF 1

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	TYPICAL ROAD CAMOUFLAGE
D-8	DRAINAGE & EROSION CONTROL DETAILS
D-9	TYPICAL DECOMMISSIONING DETAILS



ROUND MOUNTAIN SOUTH TITLE SHEET

DRAWN JAB	SCALE	SCALE AS SHOWN
DATE JULY 2021	SHEET	1 OF 1
DRAWING NO. O	RM05-TS-2	ORM05-TS-2021.0008-D1



ROAD MAINTENANCE SPECIFICATIONS

TABLE OF CONTENTS

SECTION	DESCRIPTION	Page(s)
3000	General	2-2
3100	Operational Maintenance	2-4
3200	Seasonal Maintenance	4-5
3300	Final Maintenance	5-5
3400	Other Maintenance	5-9
3500	Decommissioning	9-11

GENERAL - 3000

- The Purchaser shall be required to maintain all roads as shown on the Exhibit D-3 and D-5 maps 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.
- 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.
- The minimum required maintenance on any roads shall include the provisions specified in Subsections 3101, 3104, and 3105.
- 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

- 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.
- The Purchaser shall furnish and place (from Vine Maple Quarry, BLM stockpiles or commercial source) 500 cu. yds. of aggregate conforming to the requirements in Section 1200 of Exhibit C of this contract on the roadway and landings 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 graded, and compacted by of a vibratory roller or similar equipment.
- The purchaser shall maintain established berms and place additional berms using adjacent material where needed to protect fills as directed by the Authorized Officer.

- 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.
- 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.

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

The Purchaser shall also cut trees or brush encroaching on the road prism that are a result of his activities or winter damage during the contract period. Disposal of such vegetative material shall be by scattering below the road in accordance with Section 2100 of Exhibit C.

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 roadways only where the locations have been marked on the ground and/or approved by the Authorized Officer. The Purchaser shall furnish gravel for necessary repairs at designated locations. Repair of the 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.
- 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

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.

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

- 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.
- 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.

- The Purchaser shall be required to furnish and apply non-saline water during dry hauling periods, when directed by the Authorized Officer, for the purpose of laying dust and to prevent loss of surface material. The first application of water shall be made at the rate of one- half gallon per yd² of road surface traveled. Subsequent applications shall be made for each 40 MBF of timber or 120 yds³ of rock hauled. Subsequent watering may be done at a rate less than one-half gallon per yd² when a specified lesser rate is approved by the Authorized Officer.

The following roads shall be watered:

Road Number	From M.P.	to M.P.
33-3E-28.00 E1	0.00	0.70
33-3E-28.00 E2	0.00	0.65
34-3E-05.00	0.00	0.55
34-3E-05.01	0.00	0.31
34-3E-09.00 A-F	0.00	4.00
34-3E-09.02 B	0.00	0.35
34-3E-18.00 A-C	0.00	3.52
34-3E-19.03 A-B	0.00	1.72
34-3E-29.01 A-E	0.00	1.78

The Purchaser shall secure any necessary water permits and pay all required water fees for use of the water sources selected by the Purchaser not listed below and approved by the Authorized Officer.

Water required under these specifications can be obtained at the location(s) indicated below:

a	Willa	mette Me	ridian	5 117	145
Common Name	Sec.	T.	R.	Road No.	M.P.
Blue Goose Spring	29	33S	03E	33-3E-28.00 B	1.77
Beaver Dam Creek	33	33S	03E	33-3E-28.03	0.45
No Name	07	34S	03E	34-3E-18.00 C	0.40
Jackass Creek #3	07	34S	03E	34-3E-18.00 C	0.62
One Fifth Mile	13	34S	03E	34-3E-13.00	0.15

During drought periods when the transportation of water from the source to the

roads noted above exceeds 10 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.

3403a - During dry hauling conditions when watering is not required, the Purchaser shall reduce hauling speeds or restrict the number of loads hauled to reduce dust as directed by the Authorized Officer on the following roads:

Road Number	From M.P.	to M.P.
33-3E-28.00 E1	0.00	0.70
33-3E-28.00 E2	0.00	0.65
34-3E-05.00	0.00	0.55
34-3E-05.01	0.00	0.31
34-3E-09.00 A-F	0.00	4.00
34-3E-09.02 B	0.00	0.35
34-3E-18.00 A-C	0.00	3.52
34-3E-19.03 A-B	0.00	1.72
34-3E-29.01 A-E	0.00	1.78

Adjustments to the above schedules may be made by the Authorized Officer at his option as hauling conditions improve. The Purchaser, at his option and expense, may elect to substitute watering or other dust palliatives in lieu of the above hauling requirements provided that written approval is received from the Authorized Officer. Such authorization shall include the approval of product specifications for the application and the product to be used.

- 3404 The Purchaser may at his option and expense substitute lignin sulfonate for water on any or all road segments listed in Subsection 3403 or 3403a provided that written approval is received from the Authorized Officer. Such authorization shall include 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.
- 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.
- 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.
- 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.
- The Purchaser shall notify the Authorized Officer a minimum of 7 days in advance of application of required dust palliative.
- 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.
- If used, 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.
- 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 yd² surface.
 - 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 used, 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

Decommissioning shall consist of removing a cross drain culvert.
 Decommissioning work includes ripping and/or subsoiling, 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 or Obliterate
33-3E-31.02	0.00	0.37	Re-barricade and re- water bar
33-3E-31.03	0.00	0.60	Re-barricade and water bar
33-3E-31.05	0.00	0.56	Full Re-decommission
33-3E-32.02 A1	0.00	0.07	Re-barricade
33-3E-32.02 A2	0.07	0.28	Re-water bar
33-3E-32.02 B	0+00	7+37	Water bar
34-3E-05.02	0.00	0.32	Re-barricade and re- water bar
34-3E-05.04	0.00	0.66	Barricade and re- water bar
34-3E-09.03 A	0.08	0.08	Remove culvert
Temp Road 31-5	0+00	9+50	Full Decommission
Temp Road 32-1	0+00	12+67	Full 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)
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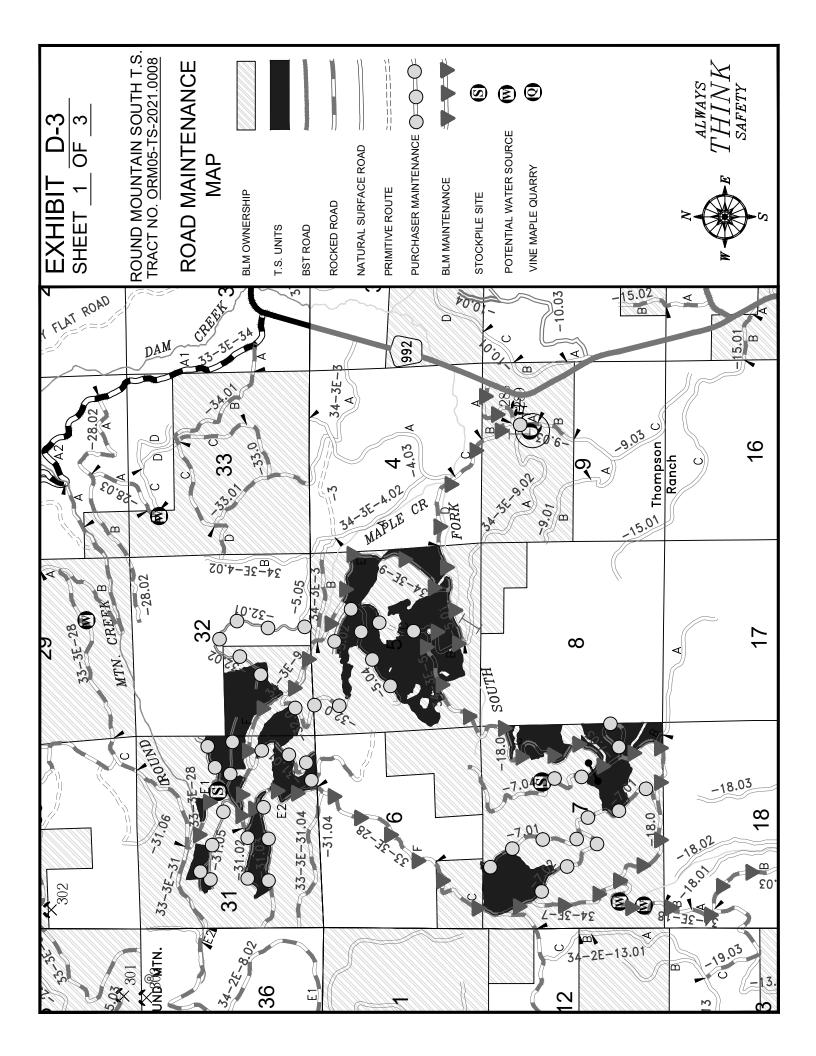
- 3505 Where draw crossing fill material is to be excavated and removed, the finished bottom of draw profile shall be re-established to its original channel grade and constructed to a 2:1 backslope ratio.
- 3506 Stockpiled slash shall be used to protect exposed areas created by the Purchaser's decommissioning operations described in these sections. Slash shall be uniformly spread and placed without bunching. The operation shall produce a dense, uniform mat. Where slash is not available, exposed soil areas shall be stabilized in accordance with Section 1800.
- 3507 Culverts not designated as salvage by the Authorized Officer for the Government

Exhibit D-2 Round Mountain South T.S. Page 11 of 11

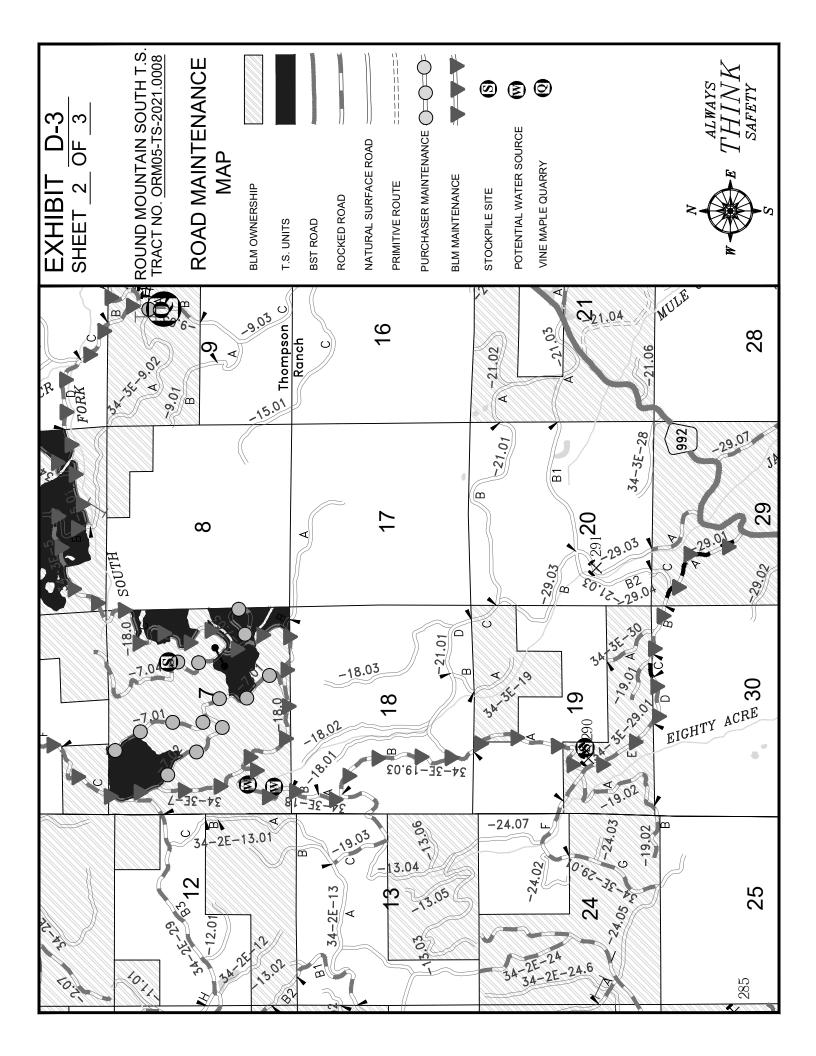
shall become the property of the Purchaser. The Purchaser shall be responsible for disposal of materials in a legal manner and for payment of any fees required. Sale of material on site is not allowed unless authorized in writing by the Authorized Officer.

- Protect areas mulched and treated with slash placement from damage by Purchaser traffic or construction equipment. Damaged areas shall be repaired by the Purchaser.
- 3509 Access shall be blocked with barricades as shown on the Typical Road Camouflage Sheet Exhibit D-7 and Drainage and Erosion Control Detail Sheet Exhibit D-8 and at locations as shown on Exhibits D-4 and D-5.
- 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.
- Water bars shall be installed across full width of roadway at spacing shown in the decommissioning worklist. Water bars shall be constructed as shown on Exhibit D-8.
- Protection of exposed surfaces shall be accomplished by placement of soil stabilization material in accordance with Section 1800 and/or placement of slash described in Subsection 3506 on designated roadways, temporary roads, landings, other areas disturbed by the purchaser's decommissioning operations in accordance with these specifications and as shown in the plans.

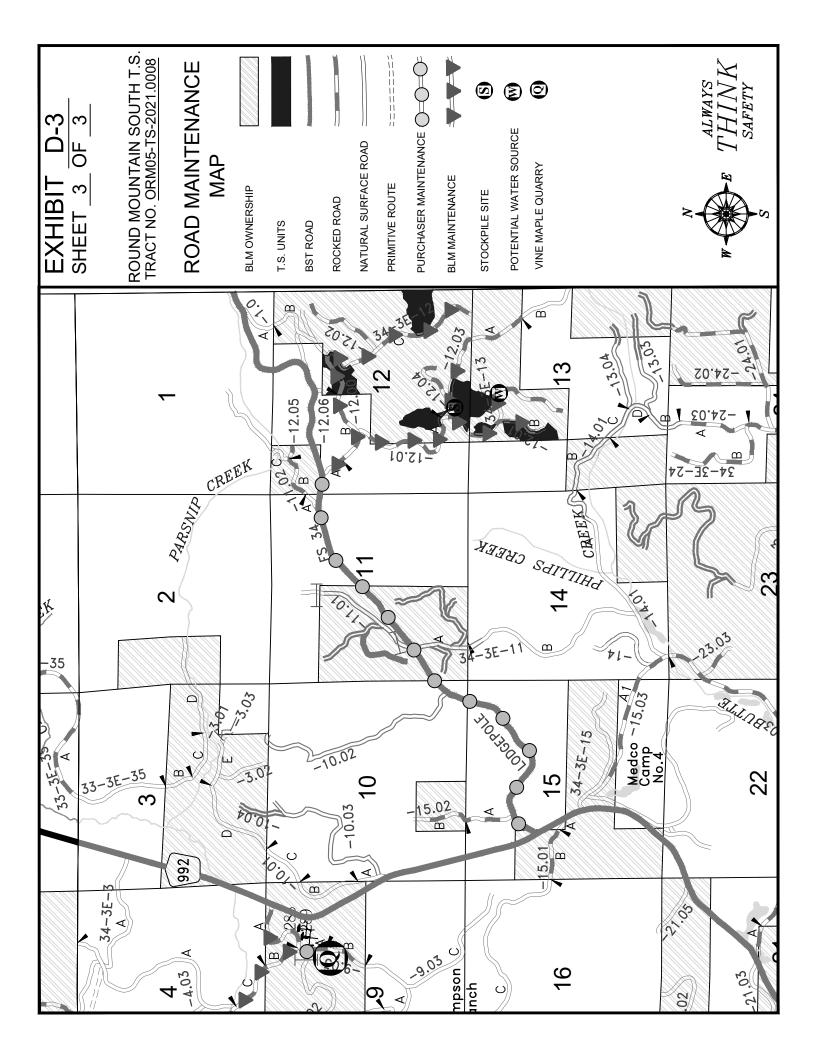














ROUND MOUNTAIN SOUTH TIMBER SALE Road Decommissioning Work List

GENERAL DEFINITIONS:

Decommission (Full) = Full Decommissioning shall include decompacting the surface to a depth of 12 to 18 inches, installing waterbars every 100', and barricading and camouflaging the road entrance. Seeding with approved native seed species and mulching with weed-free straw or approved native materials on all disturbed areas. Camouflage road entrance with debris for 100'.

Long Term Closure = Work shall include installing waterbars every 100', and barricading and camouflaging the road entrance. Seeding with approved native seed species and mulching with weed-free straw or approved native materials on all disturbed areas.

Road 33-3E-31.02 (Bourbon) (BLM) ASC

\mathbf{MP}	Remarks
0.00	Jct. w/ 33-3E-28.00. Begin long term closure
0.02	Re-establish earth barricade.
0.37	End long term closure.

<u>Road 33-3E-31.03 (Bourbon)</u> (BLM) ASC

M.P. Remarks

- 0.00 Jct. w/ 33-3E-28.00. Begin long term closure.
- 0.03 Re-establish earth barricade.
- 0.60 End long term closure.

Road 33-3E-31.05 (BLM) NAT

M.P. Remarks

- 0.00 Jct. w/ 33-3E-28.00.
- 0.02 Re-establish earth barricade. Begin full decommission. Mechanically de-compact road surface to a depth of 12 to 18 inches for the entire length of the temporary road. Camouflage road entrance with debris for 100' per Exhibit D-7.
- 0.56 End full decommission.

Road 33-3E-32.02 Segment A1 (BLM) PRR

M.P. Remarks

- 0.00 Jct. w/ 33-3E-32.01.
- 0.01 Re-establish stump barricade.

Segment A2 (BLM) NAT

0.07 Property line (into BLM). Begin long term closure. Construct earth barricade. Camouflage road entrance with debris for 100' per Exhibit D-7.

Segment B (BLM) NAT

- 0.28 Continue long term closure.
- 0.42 End long term closure.

Road 34-3E-05.02 (Vine Maple Spur)

(BLM) NAT

Sta Remarks

- 0.00 Jct. w/ 34-3E-09.02. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
- 0.01 Re-establish earth barricade.
- 0.32 End long term closure.

Road 34-3E-05.04 (Vine Maple Spur)

(BLM) NAT

Sta Remarks

- 0.00 Jct. w/ 34-3E-09.02. Begin long term closure. Camouflage road entrance with debris for 100' per Exhibit D-7.
- 0.01 Construct earth barricade.
- 0.66 End long term closure.

Road 34-3E-09.03 (Vine Maple Quarry Road)

Segment A (BLM) ASC

Sta Remarks

- 0.00 Jct. w/ 34-3E-09.02.
- 0.08 Remove 18" temporary culvert. Create earth barricade from trench where culvert was removed.

Temp Road 31-5 NAT

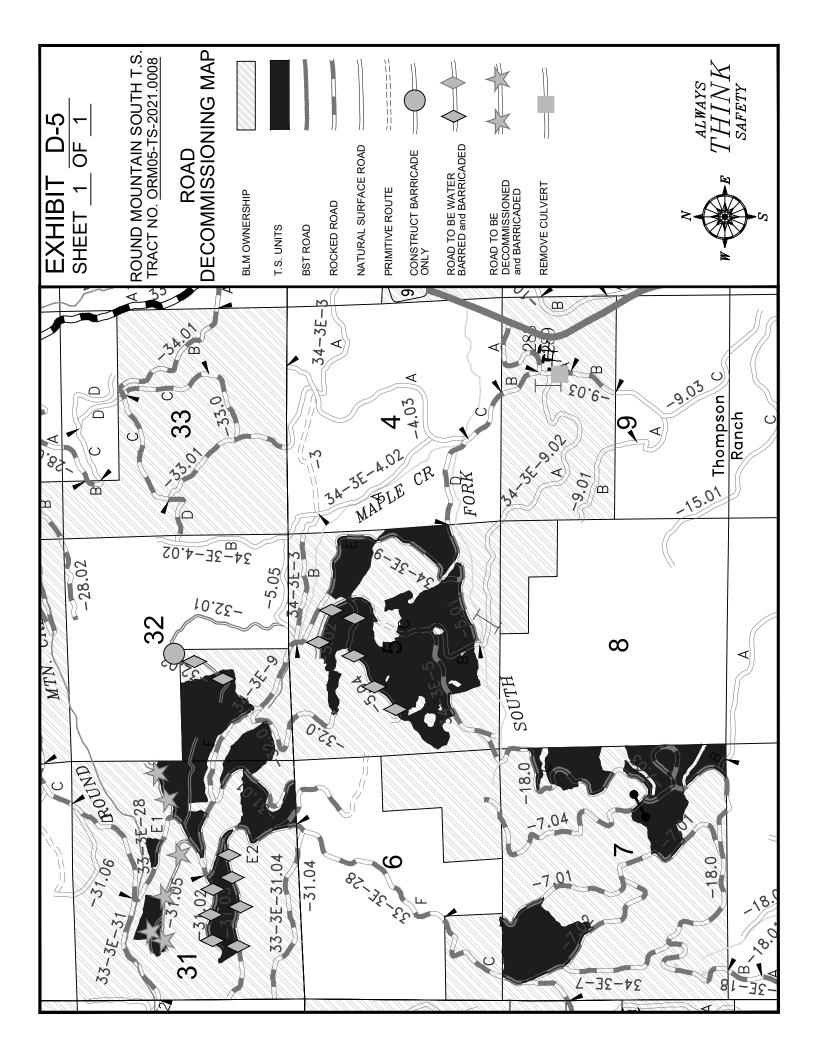
MP Remarks

- 0.00 Jct. w/ 33-3E-31.05. Begin full decommission. Mechanically de-compact road surface to a depth of 12 to 18 inches for the entire length of the temporary road. Camouflage road entrance with debris for 100'.
- 0.18 End full decommission.

Temp Road 32-1 NAT

MP Remarks

- 0.00 Jct. w/ 33-3E-28.00. Begin full decommission. Mechanically de-compact road surface to a depth of 12 to 18 inches for the entire length of the temporary road. Camouflage road entrance with debris for 100'.
- 0.02 Re-establish earth barricade.
- 0.24 End full decommission.





			-	MAINTER	MAINTENANCE RESPONSIBILIT	SIBILITY		INC**		ROAD C	LOSURE AN	ROAD CLOSURE AND DECOMMISSIONING	SSIONING	
ROAD NUMBER	MOЯЭ	OT	LENGT	BLM MAINTENANCE	PURCHASER MAINTENANCE	THIRD PARTY MAINTENANCE	ИЯЭТАМ SAHЭЯUЧ)	врот воск	INSTALL EARTH, BOULDER OR STUMP BARRICADE, OR MEGA GATE	CAMOU- FLAGE ROAD	INSTALL WATER BARS	REMOVE	RIPPING	SOIL STABILIZATION (SEED & MULCH)
ROAD NUMBER	MP/STA	MP/STA	MILE/STA	MILE	MILE	MILE	MILE	C.Y.	EACH	FEET	EACH	EACH	STATION	ACRE
33-3E-28.00 E1	0.00	0.70	0.70	0.70			0.70							
33-3E-28.00 E2-F	0.00	1.55	1.55	1.55			0.65							
33-3E-31.01	0.00	29.0	0.57		0.57									
33-3E-31.02	0.00	0.37	0.37		0.37				1		18			
33-3E-31.03	0.00	09'0	09.0		09:0				1		30			
33-3E-31.05	0.00	99.0	0.56		0.56				1	100	28		29.57	1.35
33-3E-31.07 A	0.00	0.13	0.13		0.13									
33-3E-31.08	00+0	22+87	0.43		0.43									
33-3E-32.00	0.00	0.70	0.70		0.70									
33-3E-32.01	00.0	0.61	0.61		0.61									
33-3E-32.02 A1	0.00	0.07	0.07		0.07				1					
33-3E-32.02 A2	0.07	0.28	0.21		0.21				1	100	10			0.10
33-3E-32.02 B	00+0	28+2	0.14		0.14						7			0.35
34-2E-29.00 C	0.00	0.54	0.54	0.54										
34-3E-01.00 B	0.00	0.02	0.02	0.02										
34-3E-03.00 B	0.00	0.02	0.02		0.02									
34-3E-05.00	0.00	0.55	0.55	0.55			0.55							
34-3E-05.01	0.00	0.31	0.31	0.31			0.31							
34-3E-05.02	0.00	0.32	0.32		0.32				1	100	15			
34-3E-05.04	0.00	99.0	99.0		0.66				1	100	32			
34-3E-05.05	0.00	0.07	0.07		0.07									
34-3E-07.00	0.00	0.73	0.73	0.73										
34-3E-07.01	0.00	1.40	1.40		1.40									
PAGE 1 TOTALS			11.26	4.40	6.86		2.21		7	400	140		29.57	1.80

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

** 500 CY of spot rock shall be placed on roads after use. Rock shall be obtained from existing BLM stockpiles, Vine Maple Quarry, or from a commercial source as described in Exhibit D-2, Section 3102.



REV. NO.

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU

OF LAND MANAGEMENT MEDFORD DISTRICT MEDFORD, OREGON

APPROV

ESTIMA DRAWN: JAB	ESTIMATE OF QUANTITIES*	SCALE: NONE
	<u> </u>	JOSEPH MONE
DATE: JULY 2021	o o	SHEET: 1 OF 2

ORM05-TS-2021.0008-D6

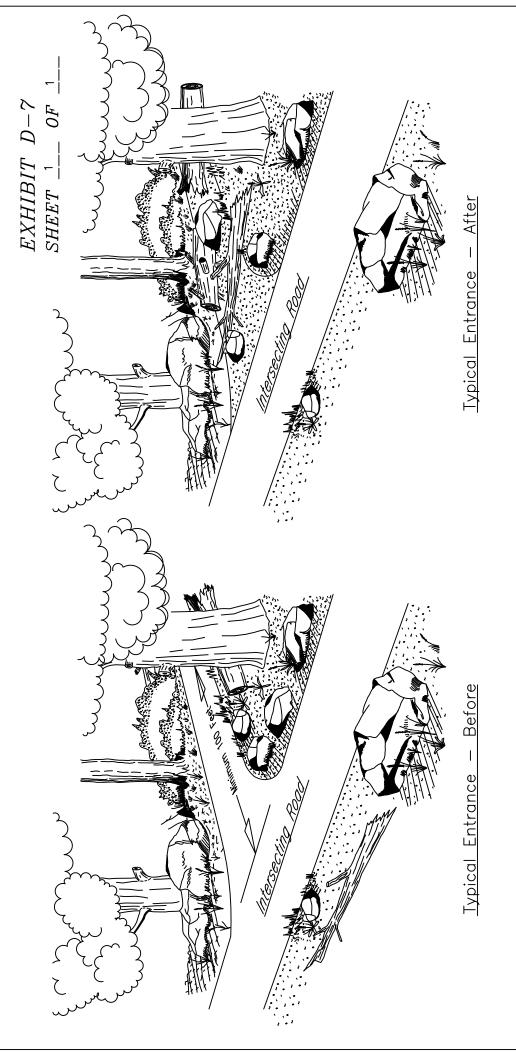
DRAWING NO.

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2.85	51.74	~	161	009	80	200	13.58		11.77	19.53	31.30			PROJECT TOTALS
1.05	22.17	_	21	200	1		11.37		4.91	15.13	20.04			PAGE 2 TOTALS
1.80	29.57		140	400	7		2.21		98.9	4.40	11.26			PAGE 1 TOTALS
09:0	12.67		12	100	-				0.24		0.24	12+67	0+0	Temp Road 32-1
0.45	9.50		6	100					0.18		0.18	0+20	00+0	Temp Road 31-5
									2.43		2.43	2.43	0.00	FS34
							1.78			1.78	1.78	1.78	0.00	34-3E-29.01 A-E
							1.72			1.72	1.72	1.72	0.00	34-3E-19.03 A-B
							3.52			3.52	3.52	3.52	0.00	34-3E-18.00 A-C
										0.15	0.15	0.15	0.00	34-3E-13.00
										69'0	69.0	69.0	0.00	34-3E-12.03 A
										1.25	1.25	1.25	0.00	34-3E-12.01 A-B
										1.67	1.67	1.67	0.00	34-3E-12.00 A-C
		-							0.08		0.08	0.08	0.00	34-3E-09.03 A
									0.45		0.45	0.80	0.35	34-3E-09.02 C
							0.35			0.35	0.35	0.35	0.00	34-3E-09.02 B
									0.02		0.02	0.02	0.00	34-3E-09.02 A
							4.00			4.00	4.00	4.00	0.00	34-3E-09.00 A-F
									0.40		0.40	0.40	0.00	34-3E-07.04
									0.43		0.43	0.43	0.00	34-3E-07.03
									0.68		0.68	0.68	0.00	34-3E-07.02
ACRE	STATION	EACH	EACH	FEET	EACH	C.Y.	MILE	MILE	MILE	MILE	MILE/STA	MP/STA	MP/STA	ROAD NUMBER
SOIL STABILIZATION (SEED & MULCH)	RIPPING	REMOVE	INSTALL WATER BARS	CAMOU- FLAGE ROAD	INSTALL EARTH, BOULDER OR STUMP BARRICADE, OR MEGA GATE	аРОТ ROCK	ИЯЭТАW	THIRD PARTY MAINTENANCE	PURCHASER MAINTENANCE	BLM MAINTENANCE	LENGTI	OT	FROM	ROAD NUMBER
	ISSIONING	ROAD CLOSURE AND DECOMMISSIONING	CLOSURE AI	ROAD ((INC**	16	SIBILITY	MAINTENANCE RESPONSIBILITY	MAINTE	Н			
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^{*} FOR INFORMATIONAL USE ONLY, QUANTITIES SHOWN ARE NOT PAY ITEMS.

** 500 CY of spot rock shall be placed on roads after use. Rock shall be obtained from existing BLM stockpiles, Vine Maple Quarry, or from a commercial source as described in Exhibit D-2, Section 3102.

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<u> </u>	REV. NO.	DESCRIPTION		DATE	APPROV.
1	UNITED STAT	JNITED STATES DEPARTMENT OF THE INTERIOR BUREAU	밀	TER	IOR BUREAU
	OF LAN	OF LAND MANAGEMENT MEDFORD DISTRICT	FORD	DIS	TRICT
		MEDFORD, OREGON	NO		
	ES	ESTIMATE OF QUANTITIES*	Ę	Ë	*o
	DRAWN: JAB				SCALE: NONE
	DATE: JULY 2021	1			SHEET: 2 OF 2
	DRAWING NO.	ORM05-TS-2021.0008-D6			



Notes:

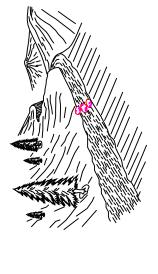
- vehicle use. An Earth Berm or equivalent barricade shall be constructed at road entrance as The Purchaser shall barricade and Camouflage the road prism and disguise the roadbed Camouflaged entrances shall consist of logs, slash, boulders and others debris placed along road entrances for a minimum of 100 feet or to the first curve or hillcrest to discourage so that the road entrance and roadway are indiscernible from the intersecting road. approved by the Authorized Officer..
- 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 Where multiple entrances exist, the work shall include obscuring all road entrances. No live trees should be used without approval of the prism to the extent possible. Authorized Officer.

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

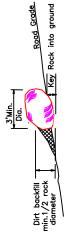
DUREND OF LAND MANAGEMENT ORD DISTRICT - MEDFORD, ORE Typical Road Camouflage

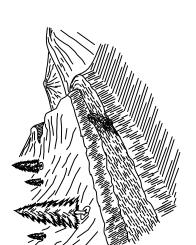
NONE	r 1 of 1	DRAWING NO. ORM05-TS-2021.0008-D7
SCALE	SHEET	rs-202
~	JULY 2021	ORM05-1
JAB	JULY	Š.
)RAWN)ATE	RAWING

ROUND MOUNTAIN SOUTH T.S. OF 2 D-8EXHIBIT SHEET



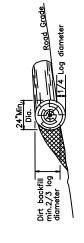






LOG BARRICADE

TRENCH BARRICADE



3' Min.(5' Max.)

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

1. BARRICADE LENGTH SHALL EXTEND ACROSS THE ENTIRE ROAD SURFACE TO A POINT SUFFICIENT TO PROHIBIT MOTOR VEHICLE TRAFFIC.

2. THE EXACT LOCATION SHALL BE AS STAKED IN THE FIELD.

3. THE BARRICADE SHALL BE SKEWED AS NEEDED TO DRAIN OR AS DIRECTED BY THE AUTHORIZED OFFICERS REPRESENTATIVE.

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A MINIMUM OF 1' IS OF LEVEL GROUND IS NEEDED BETWEEN TO TOE OF THE DIRT BERM AND THE EDGE OF THE TRENCH.

- 1. ROCK BARRICADE SHALL BE CONSTRUCTED AS SHOWN ABOVE.
 2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
 3. THE LENGTH SHALL BE SUFFICIENT TO BLOCK ROAD FROM VEHICLE USE.
- THE MINIMUM DIAMETER OF ROCK SHALL BE 3 FEET. THE MAXIMUM SPACE BETWEEN ROCKS SHALL BE 36" OR AS APPROVED BY THE AUTHORIZED OFFICER.

SKEW DIAGRAM

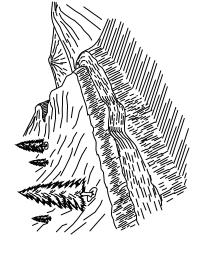
DATE
8
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REV. NO.	 NO. DESCRIPTION DATE APPROV. 	DATE	APPROV.
UNITED ST	UNITED STATES DEPARTMENT OF THE INTERIOR	OF THE	INTERIOR
8	BUREAU OF LAND MANAGEMEN	ANAGEMEN	>
MEDFORD	Medford district - Mi	MEDFORD, OREGON	OREGON

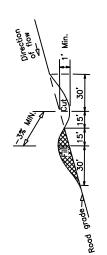
RAINAGE & EROSION CONTROL DETAILS

טרט זויירטוס	SCALE	NONE	Ę
DATE JULY 2021	SHEET	1 OF	2

SHEET 2 OF 2 ROUND MOUNTAIN SOUTH T.S. D-8EXHIBIT



WATER DIP

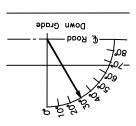


Level line

5

WATER_BAR

- 1. WATER DIPS SHALL BE CONSTRUCTED AS SHOWN ABOVE.
 2. EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED OFFICER PRIOR TO CONSTRUCTION.
 3. ALL WATER DIPS SHALL BE SKEWED 30 DEGREES.
 4. THE LENGTH SHALL BE SUFFICIENT TO EXTEND FROM THE CUT BANK TO THE FILL SLOPE AND BE READILY CROSSED BY HIGH CLEARANCE TYPE VEHICLES.



1. CROSS-DRAINS SHALL BE CONSTRUCTED AS SHOWN ABOVE.	EXACT LOCATION WILL BE FLAGGED BY THE AUTHORIZED	OFFICER PRIOR TO CONSTRUCTION.	ALL CROSS DRAINS SHALL BE SKEWED 30 DEGREES.	4. THE CROSS-DRAINS INVERT SHALL BE SMOOTH AND	FREE DRAINING.
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IAGRAM
SKEW DI

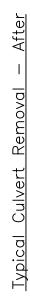
Down Grade
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100 co.
2007

REV. NO.	REV. NO. DESCRIPTION DATE APPROV.	DATE	APPROV.
UNITED STA	UNITED STATES DEPARTMENT OF THE INTERIOR BURFAIL OF LAND MANAGEMENT	OF THE	INTERIOR
MEDFORD	DISTRICT - ME	EDFORD,	OREGON
DRAI	DRAINAGE &	ERO.	EROSION
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DRAWN	JAB	SCALE		NONE	Ε	
DATE	JULY 2021	SHEET 2 OF 2	7	OF	2	
DRAWING NO.	Ĭ	DRM05-TS-2021.0008-D8	7	8000	-08	

Before Typical Culvert Removal

ROUND MOUNTAIN SOUTH T.S. EXHIBIT D-9 SHEET 1 OF

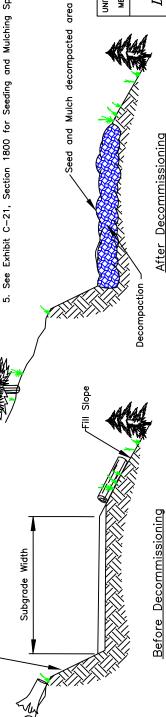


Slopes

- The Purchaser shall barricade, and decompact the road prism. Barricades shall be constructed as shown for each road.
- 2. Ditchlines at intersecting roads will be restored as indicated on plan view
- determined by the Authorized Officer that decompaction may cause unacceptable damage to the root systems of residual trees along a majority of the road, decompaction may be intermittent, or scarification may be used instead. Decopacted areas shall be seed and mulched after completion. 3. Road surface shall be decompacted for its entire length using mechanical equipment. Decompact road surface to a depth of 12 to 18 inches or to a point where 10 inch diameter stones are the dominant substrate (whichever is shallower). Where it is
- 4. All culverts shall be removed from road for its entire length. Excavated culverts shall be left open to drain and have slopes of 1½:1. Where draw culverts are removed the grade of the channel shall be restored to match existing stream. 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.

Cut Slope

5. See Exhibit C-21, Section 1800 for Seeding and Mulching Specifications.



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

Decommission Detail Typical Full

	DRAWN JAB	SCALE	NONE
	DATE JULY 2021	SHEET 1 OF 1	
	DRAWING NO. ORMOE	DRM05-TS21.0008-D9	60
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Typical Full Decommission

Form 5440-9 (January 2018)

UNITED STATES DEPARTMENT OF THE INTERIOR

Name of Bidder
Tract Number
 Sale Name
Sale Notice (dated)
BLM District

BUREAU OF LAND MANAGEMENT				
DEPOSIT AND BID FOR: (Check One):		Sale Name		
☐ Timber and/or Other Wood Products or		Sale Notice (dated)		
(Examples of Other Wood Products: biomass, firewood, posts, poles, etc) ☐ Vegetative Resources (Examples of Vegetative Resources: boughs, pinyon nuts, cones, plants, etc)		BLM District		
Sealed Bid for Sealed Bid Sale	Sealed Bid for Sealed Bid Sale			
Time for opening sealed bids a.m. p.m.	Sale commences	☐ a.m. ☐ p.m.		
On (date) Place	On (date)	Place		
In response to the above dated Sale Notice, the required deposit and bid are hereby submitted for the purchase of designated Timber and/or Other Wood Products or Vegetative Resources on the tract specified above.				
Required bid deposit is \$and is enclosed in the form of:				
cash money order cashier's check certified check bank draft				
bid bond of corporate surety on approved list of the United States Treasury guaranteed remittance approved by the authorized office				

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

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

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

BID SUBMITTED			ORAL BID MADE			
PRODUCT & SPECIES	UNIT	ESTIMATED VOLUME OR QUANITY	UNIT PRICE	TOTAL VALUE	UNIT PRICE	TOTAL VALUE
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
			X	=	X	=
TOTAL PURCHASE PRICE						

(Continued on Page 2) (Form 5440-9, Page 1) If sale contract is executed, undersigned is liable for total purchase price including all modifications executed under the terms of the contract. Timber and/or Other Wood Products or Vegetative Resources designated for taking may be less or more than total estimated volume or quantity shown above. Undersigned certifies bid was arrived at by bidder or offeror independently, and was tendered without collusion with any other bidder or offeror. In submitting or confirming this bid, undersigned agrees to the foregoing provisions, applicable regulations, and certifies that he is authorized to act as, or on behalf of, the bidder.

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

NOTICES

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

AUTHORITY: 38 FR 6280 and 43 CFR 5442.1

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

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

EFFECT OF NOT PROVIDING INFORMATION: Filing this deposit and bid information is necessary only when an individual wishes to participate in a sealed or auction bid sale for Timber and/or Other Wood Products or Vegetative Resources.

(Continued on Page 3) (Form 5440-9, Page 2)

INSTRUCTIONS TO BIDDERS

- 1. AUTHORITY Timber and/or Other Wood Products or Vegetative Resources, located on the revested Oregon and California Railroad Grant Lands and on the reconveyed Coos Bay Wagon Road Grant Lands is administered and sold pursuant to authority of the Act of August 28, 1937 (50 Stat. 874; 43 U.S.C. 1181a); Timber and/or Other Wood Products or Vegetative Resources located on other public lands of the United States under jurisdiction of the Bureau of Land Management are administered and sold pursuant to authority of the Act of July 31, 1947 (61 Stat. 681), as amended, by the Act of July 23, 1955 (69 Stat. 367; 30 U.S.C. 601 et. seq.). Regulations of the Secretary of the Interior governing sale of Timber and/or Other Wood Products or Vegetative Resources, are codified in 43 CFR Group 5400.
- 2 QUALIFICATIONS OF BIDDERS A bidder for sale of Timber and/or Other Wood Products or Vegetative Resources must be either (a) a citizen of the United States, (b) a partnership composed wholly of such citizens, (c) an unincorporated association composed wholly of such citizens, or (d) a corporation authorized to transact business in the State in which the Timber and/or Other Wood Products or Vegetative Resources are located.
- 3. INSPECTION OF TIMBER AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES Bidder is invited, urged, and cautioned to inspect the Timber and/or Other Wood Products or Vegetative Resources prior to submitting a bid. By executing the Timber and/or Other Wood Products or Vegetative Resources sale contract, bidder warrants that the contract is accepted on the basis of his examination and inspection of the Timber and/or Other Wood Products or Vegetative Resources and his opinion of its value.
- 4. DISCLAIMER OF WARRANTY Government expressly disclaims any warranty of the fitness of the designated Timber and/or Other Wood Products or Vegetative Resources for any purpose of the bidder; all Timber and/or Other Wood Products or Vegetative Resources are to be sold "As Is" without any warranty of merchantability by Government. Any warranty as to the quantity or quality of Timber and/or Other Wood Products or Vegetative Resources to be sold is expressly disclaimed by Government.
- 5. BIDS Sealed or written bids for not less than the advertised appraised price, per Timber and/or Other Wood Products or Vegetative Resources must be submitted in duplicate to the District Manager who issued *Timber and/or Other Wood Products or Vegetative Resources Sale Notice*.
 - (a) Sealed Bid Sales Bids will be received until time for opening which is set out in the Notice. Enclose both copies of bid with required bid deposit in a sealed envelope marked on the outside Bid for Timber and/or Other Wood Products or Vegetative Resources, time bid is to be opened, tract number, and legal description of land on which Timber and/or Other Wood Products or Vegetative Resources are located. In event of a tie, the high bidder shall be determined by lot from among those who submitted the tie bids.
 - (b) Auction Sales Submission of the required bid deposit and a written bid is required to qualify for oral bidding. Oral bidding shall begin from the highest written bid. No oral bid will be considered which is not higher than the preceding bid. In the event there is a tie in high written bids, and no oral bidding occurs, the bidder who was the first to submit his bid deposit and written bid shall be declared the high bidder. If the officer conducting the sale cannot determine who made the first submission of high tie written bids, the high bidder shall be determined by lot. High bidder must confirm his bid, in writing, immediately upon being declared high bidder.
 - (c) Except as otherwise provided in 43 CFR 5442.2, bids will not be considered in resale of Timber and/or Other Wood Products or Vegetative Resources remaining from an uncompleted contract from any person or affiliate of such person who failed to complete the original contract because of (1) cancellation for the purchaser's breach or (2) through failure to complete payment by expiration date.
 - (d) When it is in the interest of the Government to do so, it may reject any and all bids and may waive minor deficiencies in bids or in sale advertisement.
- 6 BID FORMS All sealed, written bids, and confirmation of oral bids shall be submitted on forms provided by Government.
 - (a) Timber and/or Other Wood Products or Vegetative Resources Sales For each product and species, bids shall specify (1) Bureau of Land Management estimated unit volume or quantity, (2) bidder's price per unit and total value, and (3) bidder's total purchase price. Estimated volume and price per unit are to be used for administrative and appraisal purposes only. Upon award of contract, the high bidder agrees to pay the Government for the Timber and/or Other Wood Products or Vegetative Resources designated for removal in accordance with the terms of the contract. Timber and/or Other Wood Products or Vegetative designated for taking may be less or more than total estimated volume or quantity shown above.
- 7. BID DEPOSIT All bidders must make a deposit of not less than the amount specified in the Timber and/or Other Wood Products or Vegetative Resources

- Notice. Deposit may be in the form of cash, money orders, bank drafts, cashiers or certified checks made payable to the Department of the Interior BLM, bid bonds of a corporate surety shown on the approved list of the United States Treasury Department (Applies To Timber Only), or any approved guaranteed remittance approved by the Contracting Officer. Upon conclusion of bidding, the bid deposit of all bidders, except high bidder, will be returned. The cash deposit of the successful bidder may be applied toward the required sale deposit and/or the purchase price. Cash not applied to the sale deposit or the purchase price, or a corporate surety bid bond, will be returned at the time the contract is signed by the Government.
- 8. AWARD OF CONTRACT Government may require high bidder to furnish such information as is necessary to determine the ability of bidder to perform the obligation of contract. Contract will be awarded to high bidder, unless he is not qualified or responsible or unless all bids are rejected. If high bidder is not qualified or responsible or fails to sign and return the contract together with required performance bond and any required payment, contract may be offered and awarded to the highest bidders qualified, responsible, and willing to accept the contract.
- 9. TIMBER AND/OR OTHER WOOD PRODUCTS OR VEGETATIVE RESOURCES SALE CONTRACTS To be executed by purchaser, has been prepared by Government, and may be examined in the District or Field Manager's office.
- 10. PERFORMANCE BOND (Primarily Used For Timber Sales)
 - (a) A performance bond in an amount of not less than 20 percent of total purchase price is required, but the amount of the bond shall not be in excess of \$500,000, except when the purchaser opts to increase the minimum bond to permit cutting prior to payment as provided in 43 CFR 5451.2, or in the event the purchaser is a holder of an unresolved default the bond may be increased as provided in 43 CFR 5450.1(b). Performance bond may be (1) bond of a corporate surety shown on approval list issued by the United States Treasury Department and executed on an approved standard form, (2) personal surety bond executed on an approved standard form if Government determines principals and bondsman are capable of carrying out the terms of the contract, (3) cash bonds, (4) negotiable securities of the United States, or (5) any guaranteed remittance approved by the Contracting Officer.
 - (b) If purchaser elects to cut Timber and/or Other Wood Products or Vegetative Resources without skidding or yarding it to a loading point or removing it prior to the payment of the second or subsequent installments, Government shall require an increase in amount of performance bond initially required by an amount equal to the value of Timber and/or Other Wood Products or Vegetative Resources to be cut. Such increase must be on a bond rider form supplied by Government and be approved, in writing, by Government prior to cutting Timber and/or Other Wood Products or Vegetative Resources covered by the bond increase. This increased amount of bond shall be used to assure payment for Timber and/or Other Wood Products or Vegetative Resources cut in advance of payment.
- 11. PAYMENT BOND— (Primarily Used For Timber Sales)
- If purchaser elects to (a) cut and remove Timber and/or Other Wood Products or Vegetative Resources, or (b) remove Timber and/or Other Wood Products or Vegetative Resources already cut which has been secured by an increased performance bond as provided in paragraph 10(b) above, before payment of the second or subsequent installments, Government shall require a payment bond on a form supplied by Government. Purchaser shall obtain written approval from Government of payment bond prior to cutting and/or removal of Timber and/or Other Wood Products or Vegetative Resources covered by the bond. Payment bond shall be used to assure payment for Timber and/or Other Wood Products or Vegetative Resources cut and/or removed in advance of payment.
- 12 PAYMENT OF PURCHASE PRICE For sales of \$500 or more, Government may allow payment by installments. Except as discussed in paragraphs 10 and 11 above, no part of any Timber and/or Other Wood Products or Vegetative Resources sold may be severed, cut, or removed unless advance payment has been made as provided in contract.
- 13. LIQUIDATED DAMAGES Within thirty (30) days from receipt of Timber and/or Other Wood Products or Vegetative Resources Sale Contract, the successful bidder shall sign contract and return it to Government, together with required bond and any required payment. If successful bidder fails to comply within the stipulated time, his bid deposit shall be retained by Government as liquidated damages.
- 14. NINETY-DAY SALES If no bid is received within time specified in the advertisement of sale and if Government determines that there has been no significant rise in the market value of Timber and/or Other Wood Products or Vegetative Resources, it may, in its discretion, keep the sale open, not to exceed ninety (90) days.

(Continued on Page 4) (Form 5440-9, Page 3)

- 15. UNAUTHORIZED USE OF GOVERNMENT PROPERTY A sale may be refused to high bidder who has been notified that he has failed to make satisfactory arrangements for payment of damages resulting from unauthorized use of, or injury to, property of the United States.
- 16. EQUAL OPPORTUNITY CLAUSE This contract is subject to the provisions of Executive Order No. 11246 of September 24, 1965, as amended, which sets forth the nondiscrimination clauses. Copies of this order may be obtained from the District Manager. 43 CFR 60-1.7(b) requires that the Equal Opportunity Compliance Report Certification will be completed by prospective contractors. Certification may be obtained from District Manager.
- 17. LOG EXPORT All timber offered for sale except as noted in the *Timber Sale Notice* is restricted from export from the United States in the form of unprocessed timber and cannot be used as a substitute for exported private timber. For the purpose of this contract, unprocessed timber is defined as: (1) any logs except those of utility grade or below, such as saw logs, peeler logs, and pulp logs; (2) cants or squares to be subsequently remanufactured exceeding eight and three quarters (8-3/4) inches in thickness; (3) split or round bolts or other roundwood not processed to standards and specifications suitable for end product use; or (4)
- western red cedar lumber which does not meet lumber of American Lumber Standards Grades of Number 3 dimensions or better, or Pacific Lumber Inspection Bureau R-List Grades of Number 3 common or better. Timber manufactured into the following will be considered processed: (1) lumber and construction timbers, regardless of size, manufactured to standards and specifications suitable for end product uses; (2) chips, pulp and pulp products; (3) green or dry veneer and plywood; (4) poles and piling cut or treated for use as such; (5) cants, squares, and lumber cut for remanufacture of eight and three quarters (8-3/4) inches in thickness or less; or (6) shakes and shingles. In event purchaser wishes to sell any or all of timber restricted from export in the form of unprocessed timber, the buyer, exchanges, or recipient shall be required to comply with contractual provisions relating to "unprocessed timber". Special reporting, branding and painting of logs may be included in contract provisions.*
- 18. DETAILED INFORMATION Detailed information concerning contract provisions, bid, performance bond forms, tract location maps, and access conditions may be obtained from the District Manager. All persons interested in bidding on the products listed are encouraged to familiarize themselves with all such detailed information.